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Emergency Management Operations Process Mapping : Public Security Technical Program Study

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Abstract

The Public Security Technical Program (PSTP) Emergency Management (EM) Operations Process Mapping study was designed to build a generic, all-hazard representation of the emergency management operations that provide the foundation of the Canadian government response capability. The project leveraged specific works to design the approach that was used to conduct the study. These works include: capability based analysis, the four-pillared emergency management capability areas (prepare, prevent, respond, recover), the US Department of Homeland Security (DHS) Target Capability List (TCL), the Canadian Federal Emergency Response Plan (FERP), the US Department of Defense Architecture Framework (DoDAF) and the Joint Command Decision Support for the 21st Century (JCDS21) and Canadian Forces Experimental Centre (CFEC) Command and Sense (C&S) Team architecture products. The merging of concepts from these sources formed the methodology used capture integrated emergency management operation processes across all stakeholders.

This project has produced a series of architecture products that characterise high level generic emergency management response processes situated in an all-hazards environment. As outputs of this study, these products provide a baseline for further research in the area of emergency management. Using the products as templates, investigation with stakeholders will enable the capture of specific processes for a geographical region, an organisation and/or a hazard with a comprehensive and standard framework.

The outputs from this study will be used to support future PSTP activities required for program definition, and to facilitate engagement with emergency management (EM) sector authorities from all levels. As a research and analysis tool, it will be used to identify, situate and characterize key interface and decision-making steps in the overall Canadian EM process. The end product of this study may also prove useful as a first step towards developing an executable process model for more in-depth analysis of EM processes, and for use in tandem with other studies that apply modeling and simulation to assess EM operational effectiveness before and after changing elements (people/process/tools).

Résume

L'étude du Graphique du processus des opérations de la gestion des urgences du Programme technique de sécurité publique a été conçue pour élaborer une représentation générique tous risques des opérations de gestion des urgences qui sert de base à la capacité d'intervention du gouvernement canadien. Le projet a permis d'élaborer un travail spécifique en vue de concevoir l'approche, qui a été utilisée pour mener l'étude. Ce travail a été consacré notamment à l'analyse basée sur la capacité, les secteurs de capacité de gestion des urgences basée sur quatre piliers (préparer, prévenir, intervenir, rétablir), la Liste des capacités ciblées (LCC) du Department of Homeland Security (DHS) des États-Unis, le Plan fédéral d'intervention d'urgence canadien, le Cadre d'architecture du département de la Défense des États-Unis (DoDAF) et le Projet de démonstration de technologies – Aide à la décision des commandements interarmées pour le XXI^{e} siècle et les produits d'architecture de l'équipe Commandement et détection du Centre d'expérimentation des Forces canadiennes. La fusion de concepts provenant de ces sources a formé la méthodologie utilisée pour relever les processus des opérations de la gestion des urgences auprès de tous les intervenants.

Ce projet a créé une série de produits d'architecture qui caractérisent des processus génériques de gestion des urgences de niveau supérieur situé dans un environnement tous risques. En tant que résultats de cette étude, ces produits fournissent une base de référence pour d'autres recherches dans le domaine de la gestion des urgences. En utilisant ces produits comme modèles, l'étude avec des intervenants permettra de capturer les démarches spécifiques d'une région géographique, une organisation et/ou un risque dans un cadre détaillé et normalisé.

Les résultats de cette étude seront utilisés pour appuyer de futures activités PSTP exigées pour la définition de programme et pour faciliter l'engagement avec les autorités du secteur de la gestion des urgences de tous les niveaux. En tant qu'outil de recherche et d'analyse, il sera utilisé pour identifier, situer et caractériser l'interface principale et les étapes décisionnelles dans l'ensemble du processus de gestion des urgences canadien. Le produit final de cette étude peut s'avérer aussi utile en tant que première étape du développement d'un modèle de processus exécutable d'une analyse plus détaillée des processus de gestion des urgences et pourrait être utilisé en collaboration avec d'autres études qui se servent de modélisation et de la simulation pour évaluer l'efficacité opérationnelle de la gestion des urgences avant et après le changement d'éléments (personne/processus/outils).

Executive summary

Emergency Management Operations Process Mapping PSTP Study

[Greenley, A.; Poursina, S.]; DRDC CSS CR 2011-09

Introduction or background:

The main goal of the Public Security Technical Program (PSTP) is to collaboratively deliver S&T solutions that advance Canada's national capabilities to prepare for, prevent, respond to and recover from high-consequence public safety and security events (all-hazards) within the theme areas of Critical Infrastructure Protection (CIP), Security, Intelligence and Interdiction (SII) and Emergency Management and System Integration (EMSI).

This particular study was conducted under the auspices of the PSTP EMSI theme area. The Emergency Management (EM) Operations Process Mapping study is intended to bring together an integrated view of current emergency management operation processes from the federal, provincial and municipal levels. This mapping would aid the PSTP to scope common process elements that could benefit from engaging science and technology (S&T) to enhance overall EM operational effectiveness.

The study was designed to build a generic, all-hazards representation of the emergency management operations that provide the foundation of the Canadian government response capability. The project leveraged specific works to design the approach that was used to conduct the study. These works include: capability based analysis, the four-pillared emergency management capability areas (prepare, prevent, respond, recover), the US Department of Homeland Security (DHS) Target Capability List (TCL), the Canadian Federal Emergency Response Plan (FERP), the US Department of Defense Architecture Framework (DoDAF) and the JCDS21/CFEC C&S architecture products. The merging of concepts from these sources formed the methodology used capture integrated emergency management operation processes across all stakeholders.

Results:

The study has produced a data repository and associated products (process maps) that characterise emergency management response stakeholders and their activities to create a generic, all-hazard framework.

Significance:

This project has produced a series of products that characterise high level generic emergency management response processes situated in an all-hazards environment. As outputs of this study, these products provide a baseline for further research of the application of S&T in the area of emergency management. Using the products as templates, investigation with stakeholders will enable the capture of specific processes for a geographical region, an organisation and/or a hazard with a comprehensive and standard framework.

Future plans:

The outputs from this study will be used to support future PSTP activities required for program definition, and to facilitate engagement with EM sector authorities from all levels. As a research and analysis tool, it will be used to identify, situate and characterize key interface and decision-making steps in the overall Canadian EM process. The end product of this study may also prove useful as a first step towards developing an executable process model for more in-depth analysis of EM processes, and for use in tandem with other studies that apply modeling and simulation to assess EM operational effectiveness before and after changing elements (people/process/tools).

Sommaire

Graphique du processus des opérations de la gestion des urgences du Programme technique de sécurité publique – Etude DSTP

[Greenley, A.; Poursina, S.]; DRDC CSS CR 2011-09

L'objectif principal du Programme technique de sécurité publique (PSTP) est d'offrir des solutions en collaboration qui font progresser la capacité du Canada en matière de préparation, de prévention, d'intervention et de reprise des activités à la suite d'événements de sécurité publique ayant de graves conséquences sur la population (tous risques) en ce qui concerne la protection des infrastructures essentielles (PIE), la sécurité, le renseignement et l'interdiction (SRI) et la gestion des urgences et l'intégration des systèmes (GUIS).

Cette étude particulière a été menée sous les auspices de la mission du PSTP et de la GUIS. L'étude du graphique du processus des opérations de la gestion des urgences vise à réunir une vision intégrée des processus actuels des opérations de gestion des urgences des gouvernements fédéral, provinciaux et municipaux. Ce graphique permettra d'aider le PSTP à définir la portée des éléments du processus commun qui pourrait profiter de l'apport de la science et de la technologie (S & T) pour améliorer l'efficacité générale en ce qui concerne les opérations de la gestion des urgences.

L'étude a été conçue pour élaborer une représentation générique tous risques des opérations de gestion des urgences qui est à la base de la capacité d'intervention du gouvernement canadien. Le projet a permis d'élaborer des travaux spécifiques en vue de concevoir l'approche, qui a été utilisée pour mener l'étude. Ces travaux ont été consacrés notamment à l'analyse basée sur la capacité, les secteurs de capacité de gestion des urgences basée sur quatre piliers (préparer, prévenir, intervenir, rétablir), la Liste des capacités ciblées (LCC) du Department of Homeland Security (DHS) des États-Unis, le Plan fédéral d'intervention d'urgence canadien, le Cadre d'architecture du département de la Défense des États-Unis (DoDAF) et le Projet de démonstration de technologies – Aide à la décision des commandements interarmées pour le XXI^{e} siècle et les produits d'architecture de l'Équipe Commandement et détection du Centre d'expérimentation des Forces canadiennes. La fusion de concepts provenant de ces sources a formé la méthodologie utilisée pour relever les processus des opérations de la gestion des urgences auprès de tous les intervenants.

Résultats

L'étude a permis de mettre en œuvre un répertoire de données et des produits associés (graphiques de processus) qui caractérisent l'intervention d'urgence des intervenants et leurs activités pour créer une structure générique à tous risques.

Portée

Ce projet a créé une série de produits qui caractérisent des processus génériques de gestion des urgences de niveau supérieur situé dans un environnement tous risques. En tant que résultats de cette étude, ces produits fournissent une base de référence pour d'autres recherches de l'application des S & T dans le domaine de la gestion des urgences. En utilisant ces produits comme modèles, l'étude avec des intervenants permettra de capturer les démarches spécifiques d'une région géographique, une organisation et/ou un risque dans un cadre détaillé et normalisé.

Recherches futures

Les résultats de cette étude seront utilisés pour appuyer de futures activités PSTP exigées pour la définition de programme et pour faciliter l'engagement avec les autorités du secteur de la gestion des urgences de tous les niveaux. En tant qu'outil de recherche et d'analyse, il sera utilisé pour identifier, situer et caractériser l'interface principale et les étapes décisionnelles dans l'ensemble du processus de gestion des urgences canadien. Le produit final de cette étude peut s'avérer aussi utile en tant que première étape du développement d'un modèle de processus exécutable d'une analyse plus détaillée des processus de gestion des urgences et pourrait être utilisé en collaboration avec d'autres études qui se servent de la modélisation et de la simulation pour évaluer l'efficacité opérationnelle de la gestion des urgences avant et après le changement d'éléments (personne/processus/outils).

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This work was supported by Defence Research and Development Canada Centre for Security Science (DRDC CSS) Public Security Technical Program (PSTP) and prepared by CAE Professional Services.

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1 Introduction

1.1 Purpose

The Emergency Management (EM) Operations Process Mapping study is intended to bring together an integrated view of current emergency management operation processes from the federal, provincial and municipal levels. This mapping would aid the Public Security Technical Program (PSTP) scope common process elements that could benefit from engaging science and technology (S&T) to enhance overall EM operational effectiveness. The study will create a useful reference tool that will be used to identify, situate and characterize key interface and decision-making steps in the overall Canadian EM process.

The project deliverables will satisfy the following end goals:

- Engage with stakeholders,
- Further PSTP understanding,
- Provide focus to identify, situate and characterize EM in Canada,
- Identify decision making steps,
- Increase PSTPs familiarization with common operating procedures (COPs),
- Employ the use of HyperText Markup Language (HTML) to ensure the database and architecture products are user friendly and could be uploaded to a portal, and
- Be a living product to be evolved and updated.

1.2 Background

1.2.1 Public Security Technical Program (PSTP)

The main goal of the PSTP is to collaboratively deliver S&T solutions that advance Canada's national capabilities to prepare for, prevent, respond to and recover from high-consequence public safety and security events (all-hazards) within the theme areas of Critical Infrastructure Protection (CIP), Security, Intelligence and Interdiction (SII) and Emergency Management and System Integration (EMSI).

The Canadian Federal budget of 2005 provided an on-going fund with an initial five year mandate to build the baseline secretariat and to identify Public Security areas that could benefit from stimulation and coordination of S&T activity as well as consolidation of efforts. In the broader sense, the role of the PSTP was established to position S&T as a strategic lead investment to effectively achieve the federal government's public safety and security agenda. At the same time

as planning expanded S&T activities across all themes, Public Safety Canada (PS Canada) sought to exercise greater influence in the program direction due to their responsibilities related to public safety and emergency management. As a result, a Memorandum of Understanding (MOU) was signed in August 2006 between the Deputy Ministers of PS Canada and the Department of National Defence (DND), creating the Defence Research and Development Canada (DRDC) Centre for Security Sciences (CSS) so as to assist PS Canada with scientific expertise and advice in the areas of public security, operational research and analysis and capability-based planning.

1.2.2 Emergency Management Operations Process Mapping

This particular study was conducted under the auspices of the PSTP EMSI theme area. The study was designed to build a generic, all-hazards representation of the emergency management operations that provide the foundation of the Canadian government response capability. The project leveraged specific works to design the approach that was used to conduct the study. These works include: capability based analysis, the four-pillared emergency management capability areas (prepare, prevent, respond, recover), the US Department of Homeland Security (DHS) Target Capability List (TCL), the Canadian Federal Emergency Response Plan (FERP), the US Department of Defense Architecture Framework (DoDAF) and the JCDS21/CFEC C&S architecture products. The merging of concepts from these sources formed the methodology used capture integrated emergency management operation processes across all stakeholders.

The results of this study will be used to support future PSTP activities required for program definition, and to facilitate engagement with EM sector authorities from all levels. The end product of this study may also prove useful as a first step towards developing an executable process model for more in-depth analysis of EM processes, and for use in tandem with other studies that apply modeling and simulation to assess EM operational effectiveness before and after changing elements (people/process/tools).

1.3 Objective

The objective of this work is to provide a high level overview of generic emergency management response activities based on an all-hazards approach.

The outputs of this study will provide a baseline for further research in the area of emergency management. Using the outputs as templates, investigation with stakeholders will enable the capture of specific processes for a geographical region, an organisation and/or a hazard with a comprehensive and standard framework.

1.4 Scope

The scope of the mapping activities will include the investigation of the stakeholders involved in emergency management response and their associated activities and information exchanges. As the objective is to develop all-hazards, generic depiction, the end products will be kept at a high level. Information exchanges will be defined as per needlines to show interdependencies with regards to information sharing and decision making.

1.5 Deliverables

The final deliverables for this project include the following elements:

1. Diagrams Report

2. System Architect® (SA) repository of the elements identified during the data collection architecture development activities

2 Methodology

2.1 Data Collection

Data collection activities were conducted to survey and assess existing documented emergency management procedures and processes at the federal, provincial and municipal levels. Specific focus was put on regional data for British Columbia and Vancouver; Nova Scotia and Halifax; and Ontario, Toronto and Ottawa.

2.1.1 Literature Review

A literature review was conducted using standard research techniques including internet searches and government documents. Reports and reference material from previously conducted DRDC projects were consulted during the data collection activities, specifically those relating to the JCDS21) and the CFEC C&S teams' modelling of Canadian Forces (CF) domestic operations.

2.1.2 Interviews

Selected telephone interviews with stakeholders were conducted in order to confirm information detailed in the literature during the data collection activities. These interviews were conducted in an informal manner with the purpose to clarify information or to gain access to additional literature when necessary. No interviews were held to validate the architecture products that are the output of this study.

2.2 Design

The study was designed to build a generic, all-hazards representation of the emergency management operations that provide the foundation of the Canadian government response capability. The project leveraged specific works to design the approach that was used to conduct the study. These works include: capability based analysis, the four-pillared emergency management capability areas (prepare, prevent, respond, recover), the US DHS TCL, the Canadian Federal Emergency Response Plan (FERP), the US Department of Defense Architecture Framework (DoDAF) and the JCDS21/CFEC C&S architecture products. The merging of concepts from these sources formed the methodology used capture integrated emergency management operation processes across all stakeholders.

2.2.1 Capability Based Analysis

The PSTP capability-based analysis (CBA) process makes use of the architecture framework, simulation, validation and verification to provide a coherent approach to capability engineering and capability management in the enterprise environment from concept through development, and disposal. A capability can be defined as *the system-of-systems consisting of people, organization, processes, training, materiel, logistics, infrastructure, knowledge and information required to achieve a desired effect to a specified standard under specified conditions.* In application, CBA implements a system-of-systems approach to capture the interdependencies of people, processes and tools that exist both as and within complex systems. In other words, the CBA methodology

applies an “ends – ways – means” paradigm where the desired end state ‘effect’ is delivered through capability based ‘ways’ which are composed of ‘means’ comprised of people, process and tools.

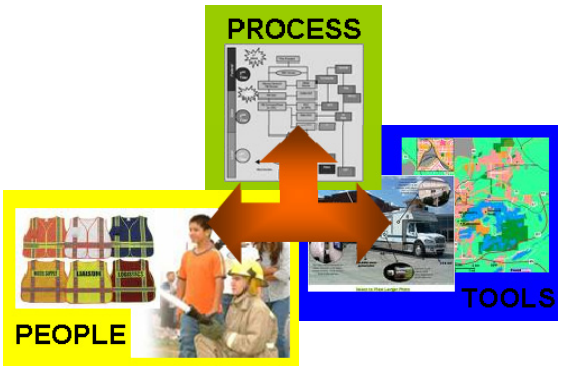

Figure 1 The People, Process and Technology Provide the Means to Achieve the Capability

The framework that the products created in this study accommodates the analysis of the people, process and tools that are required for emergency response. As such, it provides a mechanism for in-depth capability-based analysis.

CBA assesses gaps and defines ‘capability options’ for investment planning through the development of capability roadmaps. Capability roadmaps define the sequence of implementing people, process and/or technology solutions. They often include multiple integrated ‘views’, such as a S&T roadmap (short/mid/long-term S&T plan), a human resources (HR) roadmap (personnel training, recruitment plan), an equipment acquisition plan and/or a technical Standards plan. This focused planning provides a means for focusing convergence across an area over time while promoting interoperability and linked/leveraged investment plans.

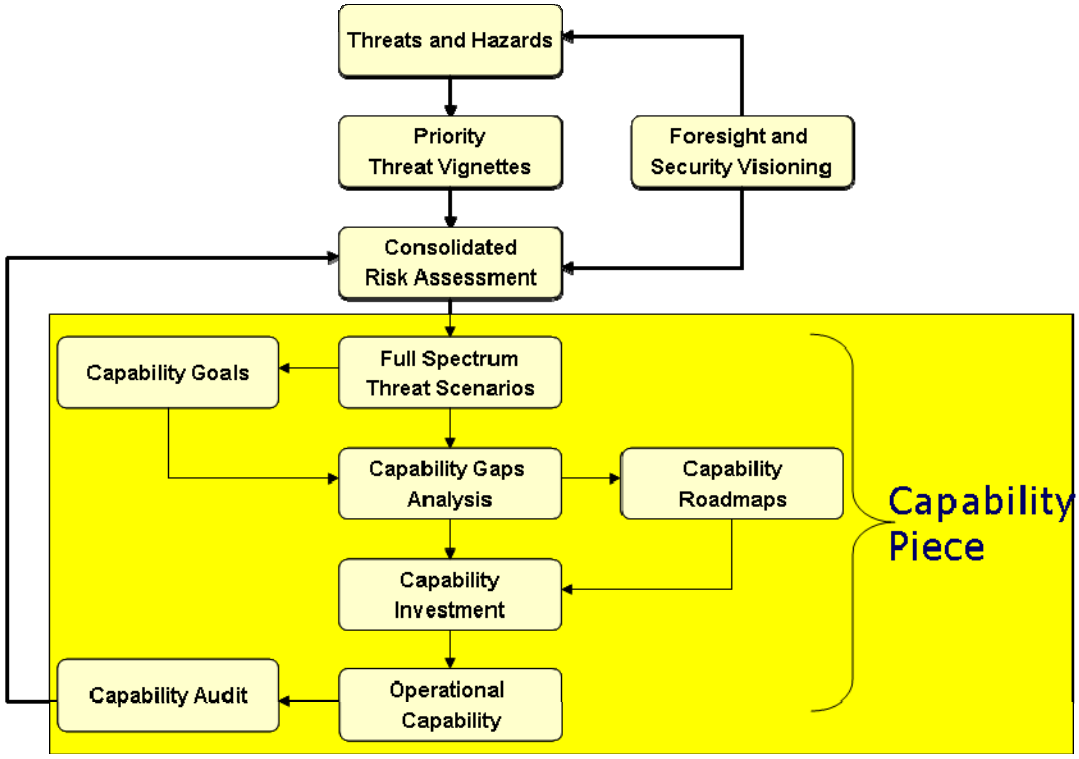

Figure 2 Capability Based Investment Model

A detailed description of capability based analysis methodology as applied by PSTP is found in Annex A.

2.2.1.1 Architecture

An architecture can be simply viewed as a set of blueprints which model or represent a wide variety of relationships inherent to the overall capability being managed. The IEEE defines architecture as "the structure of components, their interrelationships, and the principles and guidelines governing their design and evolution over time"[1]. Architectures offer distinct advantages in structuring information and managing complexity, incremental development and implementation. They impose discipline and ensure use of a common language across diverse stakeholders.

Architecture frameworks enable the analyst to capture the people, processes and tools that exist (the "as is") or need to exist (the "to be") within a capability. Architecture frameworks are also referred to as Enterprise Architectures (EA) in industry, and have been successfully applied to

[1] Institute of Electrical and Electronics Engineers, Inc. (IEEE) Standard 610.12

assist companies to optimise interdependencies and relationships between business operations, clarify their underlying infrastructure and support applications across large distributed organisations[2]. The architecture framework outlines "what" the overall structured approach is for assisting interoperability and "how" the components will operate.

The application of architectures is useful to characterise diverse elements in multi-faceted problem spaces such as pubic safety. The tool is advantageous to the analyst as it enables the capture of inter-relationships between different agencies, domains, scenarios or environments, presenting the data in one framework.

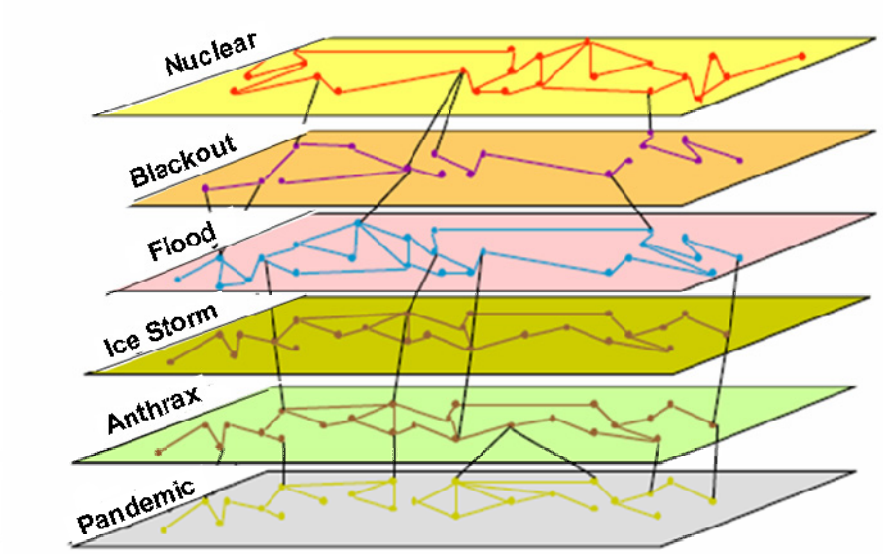

Figure 3 Architectures Facilitate Inter and Intra Relationship Capture Across Multiple Domains

The analyst can apply architecture frameworks at various levels of fidelity. This facilitates focusing in on certain lower level aspects without loosing traceability to the larger capability goal. Standardising the way information is presented provides for accurate comparison of organisations, determining if two or more systems are interoperable and for the identification of interfaces. Architecture frameworks are a tool – they provide information and insight to a problem space, such as gap identification, but they do not provide solutions. They promote understanding of business operations and processes across organisational boundaries, including jurisdictional and first responder boundaries, and foster multi-agency integration and the adoption of common standards.

Additional information on architecture and its application is included in Annex A. Section 2.2.4 below lists the specific tools that were chosen to for the architecture and process mapping efforts of the project.

[2] General Accounting Office, USA. GAO-04-798T, "The Federal Enterprise Architecture and Agencies' Enterprise Architectures are Still Maturing," May 19, 2004.

2.2.1.2 Department of Defense Architecture Framework (DoDAF)

Initially developed to define a common architectural for developing and acquiring interoperable systems by encouraging a rigorous systems engineering effort up front, the DoDAF has provided a baseline for a number of architecture frameworks in the UK, Australia and Canada. Its application has been applied to defence and public safety and security environments in the US , facilitated by the mandated use for new acquisition projects by the US DoD. The DHS developed a communications focused Public Safety Architecture Framework (PSAF) in 2006 that is an extension of DoDAF. DoDAF was chosen for this project due to its robustness, the familiarity of the research community with it and the tools that have been developed to aid in its application.

DoDAF structures the complexity of people, process and tools within and across systems in a three-pronged framework. This framework presents data as Operational Views (OV), Systems Views (SV) and Technical Views (TV). These views are used to fully document the current state, or the proposed future state, of a system or capability. Appling the DoDAF to the problem space assists with the analysis of enterprise-level systems (consisting of people, process and tools) integration characteristic of emergency management. The project will capture the tasks and activities, operational elements, and information exchanges required to accomplish emergency management response operations at the federal, provincial and municipal levels in the form of the following OV architecture products as defined by DoDAF:

1. OV-1: High-Level Operational Concept Graphic - High-level graphical/textual description of operational concept.

2. OV-2: Operational Node Connectivity Description - Operational nodes, connectivity, and information exchange needlines between nodes.

3. OV-3: Operational Information Exchange Matrix - Information exchanged between nodes and the relevant attributes of that exchange.

4. OV-4: Organisational Relationships Chart - Organisational, role, or other relationships among organizations.

5. OV-5: Operational Activity Model - Capabilities, operational activities, relationships among activities, inputs, and outputs, etc.

It is not necessary to use all of the DoDAF views at all times, however the existence of the complete framework provides a useful logic for the addition and integration of views as required throughout the life cycle of a project.

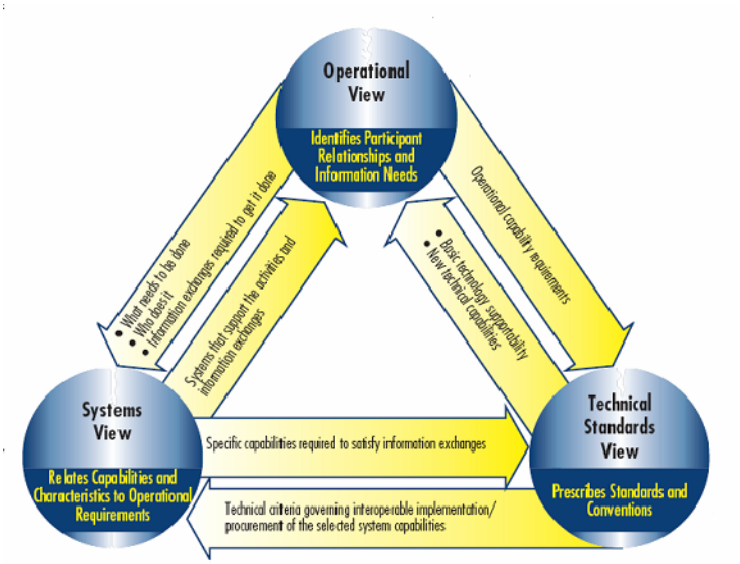

Figure 4 Department of Defense Architecture Framework (DoDAF) Views

A detailed list of the DoDAF views and their corresponding architecture products is included in Annex B.

2.2.2 Emergency Management Capability Areas

The PSTP program has been structured to deliver S&T across four capability areas for public safety and security:

6. Prepare
7. Prevent
8. Respond
9. Recover

This project aims to decompose the 'ability to act' within the Respond capability area as a means to evolve from the abstract through an architecture methodology. The application of this methodology supports PSTP's mandate in delivering S&T to the public safety and security community through direct alignment between an S&T 'input' and the respective capability area – thereby connecting S&T to more effective mission outcomes and the resultant increase in public safety and security.

2.2.3 Generic, All-Hazard Process Mapping

Two central documents guided the process mapping: the Canadian FERP and the US DHS TCL. Together, these two documents provide the framework for defining the emergency response capability in an all-hazards generic representation.

2.2.3.1 Federal Emergency Response Plan (FERP)

Traditionally, the responsibility to deal with emergencies is placed first on the individual and then on successive levels of government, as the resources and expertise of each are needed. This recognizes that when an emergency occurs people normally see to their own safety to the extent possible, and then they seek assistance from local and provincial or territorial governments if necessary. Those governments in turn seek federal support if an emergency moves beyond their capabilities[3].

A national framework for all-hazards response has been developed in the FERP. This plan outlines how the Government of Canada works with local or regional authorities and coordinates the national response when the impacts of an emergency are mainly in areas that are clearly under federal jurisdiction, or when an event is clearly of national interest and inter-jurisdictional and/or international in nature.

The FERP provided a high-level, top-down understanding of the emergency response stakeholder organisations and their roles and responsibilities. Concentration on the federal level of government through the FERP provided a generic template of emergency response. Due to the nature of the diverse provincial and municipal attributes in emergency response (such a geography, departments (names, roles and responsibilities), threats, resources, etc) it is much more difficult to present a generic provincial/territorial or municipal within the time/budget of this project. Thus stated, it is important to note that as emergency response is a bottom-up phenomenon, the structure ensures that it is applicable to future work that will need to capture the provincial/territorial and municipal response in a robust manner.

2.2.3.2 Target Capability List (TCL)

Framed by the four emergency management capability areas of prepare, prevent, respond and recover , the TCL was determined through the analysis of national emergency planning scenarios and the development of a Universal Critical Task List by the US DHS. The scenarios provided common planning factors in terms of the potential scope, magnitude, and complexity of major events which in turn helped to determine target capabilities to assist Federal, State, local, and tribal entities in understanding and defining their respective roles in a major event. The capabilities are combinations of resources that provide the means to achieve a measurable outcome resulting from performance of one or more critical tasks, under specified conditions and performance standards. The TCL is designed in such a way that ownership of a task or capability is not defined – no single entity would be expected to perform every task, neither would they be expected to have sufficient levels of every capability needed for a major event – thus, it is the

[3] http://www.phac-aspc.gc.ca/cpip-pclcpi/ann-l-eng.php, October 2006

capabilities required to perform a specified set of tasks for emergency management that are the foci. [4]

Incorporating the TCL response capability area in the project enabled us to take a step back from the specific activity details of a jurisdiction or hazard. Instead, representations of the capabilities needed to conduct emergency response operations have been captured. In this way, a standard mechanism for collecting scenario specific data regarding stakeholders and hazards across the response environment has been developed that will assist future analysis activities by the S&T community.

2.2.4 JCDS 21 and CFEC C&S Architecture

The architecture products developed by the JCDS21 TDP and the CFEC C&S Interagency Team provided a baseline for this study.

As part of the DRDC Operational Research (OR) Team's requirement to develop a simulation of joint staff activities in planning, collaboration, and decision making as part of their support to the JCDS 21 TD project, the Canada Command Joint Staff Command & Control (C2) process was modelled in order to "baseline the simulation". The objectives of the JCDS21 TDP include:

a. Understand the implications of net-centric operation within a Joint, Interagency, Multinational and Public (JIMP) framework

b. Design and demonstrate a net-enable collaborative environment that supports:

   i. CF decision-making processes within a JIMP framework

   ii. Collaborative work among distributed teams

   iii. Achievement of shared intent and decision superiority within a unified command framework

c. Develop operational and system requirements for related acquisition projects.

In order to realise these objectives, collaboration, information and intelligence analysis, and decision-making workflow process were captured using DoDAF. The resulting architecture products were used to guide the design of the JCDS 21 experiments. JCDS21 collaborated with CREC C&S Interagency Team in the conduct of their work. Similar to JCDS21, capability-based analysis and architecture development were selected the tools to support the C&S team's experimentation campaign plan. IN addition, the CFEC C&S team was required to conduct a a series of experiments in order to optimize CF support to Other Government Departments (OGDs) – the same domain as JCDS21 (domestic operations).

The resulting architecture products capture CF-OGD interactions, specifically for domestic interoperability scenarios, where the CF are placed in both lead and support roles to assist local, provincial/territorial and/or federal governments. The DoDAF architecture was created to

[4] http://www.ojp.usdoj.gov/odp/assessments/hspd8.htm

support the development of a flexible simulation environment and in the G2/ReThink simulation language and to guide the definition of metrics to validate the project deliverables.

Both primary and secondary data collection methods supported the architecture development. Initial drafts were produced by reviewing municipal, provincial/territorial and federal emergency response plans and the US National Incident Management System (NIMS). Using a spiral development approach, the products were then extended and validated at various intervals with the CF stakeholders such as Canada Command (Canada Com), the National Defence Command Centre (NDCC) and members of the Strategic Joint Staff (formerly "JSTAFF"). OGD stakeholders, such as the Government of Canada Operations Centre (GOC), the Royal Canadian Mounted Police (RCMP) national and regional teams, Vancouver Police, Public Safety Canada Regional Office (Victoria), were also consulted and contributed greatly to the product development. The research team also observed various exercises, such as Triple Play, to further their knowledge of interagency collaboration in emergency response operations.

2.2.5 System Architect®

Consideration of the two deliverables: a diagrams report and a data repository, was made when selecting the software tool to house the data collected and capture the process maps. There is an increasingly number of software applications available to support architecture development. Telelogic's System Architect® (SA) is one such application. The SA tool enables the designed to build diagrams and models representing DoD architectures, store the data collected in a robust repository, and publish the architectures for a wide audience using HTML report generation facilities. In System Architect, graphical renderings of applicable DoDAF products are not simply drawings, but rather a collection of interrelated model artefacts. Hence, data entered for one DoDAF view can be reused in another where applicable and results in a DoDAF consistent and compliant architecture[5]. The use of SA has increased recently and both the DoD and DND select it as one of the main tools for DoDAF representation.

SA was chosen as the tool for this project to house the database of the data collected and to create the models of the architecture products. Due to the increasing use of the SA tool in both DoD, DHS and DND, the selection of this tool will assist with the re-usability of the data and diagrams as well as increase the data repository as PSTP progresses future work in the area of emergency management.

2.3 Tasks

Throughout the conduct of this project, the following tasks were completed:

1. Enter data into System Architecture

    d. Implement consistent nomenclature

    e. Document sources of information (hyperlink source documents in SA)

[5] http://www.telelogic.com/Products/systemarchitect/systemarchitectfordodaf/overview.cfm

f. Design all-hazards generic representation of federal operational nodes and activities using FERP

g. Design all-hazards generic representation of activities for the provincial/municipal and non-government stakeholders level using TCL

2. Use SA to develop the following modelling products: OV2, OV3, OV5 and AV-2

3. Leverage JCDS21/CFEC C&S OV-4 documentation

4. Document the approach used in System Architect

5. Generate HTML output of all models

3 Results

3.1 Architecture

Selected DoDAF architecture products were identified to be created during the conduct of this project. These products were chosen to serve the purpose of providing an initial generic all-hazards mapping of emergency management response operations. This section will outline the products created including an introduction as to the architecture purpose, the architecture description and a screen shot of the products created in SA.

3.1.1 Operational View 1 (OV-1) High-Level Operational Concept Graphic

The Operational View 1 (OV-1) forms the strategic basis of the subsequent views. The objective of the graphic is to capture the essential entities and their relationships for this project – that is, those which apply to emergency management response operation processes. Subsequent operational views detail the exact nature of the elements presented in the OV-1 and their inter-relationships. The DoD Architectural Framework, Volume II defines the following OV-1 definition and purpose:

1. Product Definition. The High-Level Operational Concept Graphic describes a mission and highlights main operational nodes (see OV-2 definition) and interesting or unique aspects of operations. It provides a description of the interactions between the subject architecture and its environment, and between the architecture and external systems. A textual description accompanies the graphic.

2. Product Purpose. The purpose of OV-1 is to provide a quick, high-level description of what the architecture is supposed to do, and how it is supposed to do it. This product can be used to orient and focus detailed discussions. Its main utility is as a facilitator of human communication, and it is intended for presentation to high-level decision makers.

3.1.1.1 OV-1 Elements

The OV-1 elements define the main tenants of the architecture products developed for the process mapping. This section serves the purpose to outline these elements not only for the OV-1 product but for the project as a whole. Specific attributes of the elements will be expanded upon in following sections and, as such, these elements are articulated in more detail as applicable in the OV-2, OV-3, OV-4 and OV-5.

3.1.1.1.1 Emergency Management Capability Areas

The OV-1 presents the four capability areas for public safety and security as defined by the PSTP as:

1. Prepare

2. Prevent

3. Respond

4. Recover

As the purpose of this work is to focus in on the response quadrant, this capability area is highlighted in the OV-1.

3.1.1.1.2 Emergency Management Stakeholders

The emergency management environment consists of a variety of stakeholders. These can be generically categorised as:

1. Federal Government

2. Provincial/Territorial Government

3. Municipal Government

4. International Government

5. Non-Government Organisation

6. Industry

7. Media

8. Public

These categories provide generic representation throughout the architecture work as captured in the OV-1 and provide a standard baseline for defining stakeholders for future work.

3.1.1.1.3 Emergency Management Capability Enablers

The CBP approach emphasises *What do we need to be able to do in the future?* instead of the more reactive *What equipment needs to be replaced now?*

In general, a capability is defined as the "ability to act in a specific way in a specific situation". In turn, this 'ability' is generated when capacity across the following three axes are combined:

1. Processes – plans, tactics, doctrine, etc.;

2. People – civilian, emergency management personnel and first responders, military, operators, management, support staff, etc.; and

3. Tools – physical systems, equipment, tools, technologies, etc.

The OV-1 represents that the architecture products have been developed for the analysis of capabilities as they are delivered by systems that consist of people, processes and technologies.

3.1.1.1.4 Emergency Management Collaboration

Collaboration is intrinsic to all the elements mentioned above – stakeholders, capability areas and capability enablers. The frequently mentioned "no one department/agency has the ability to do it alone" aspect of emergency management is captured in the OV-1 by permeable lines. These permeable lines provide the interface for collaboration and decision making both between government levels and with external stakeholders as defined by the people, processes and tools required for emergency management across all capability areas.

3.1.1.2 OV-1 Product

The following OV-1 provides a graphical representation of the project and the framework that will be presented in subsequent products:

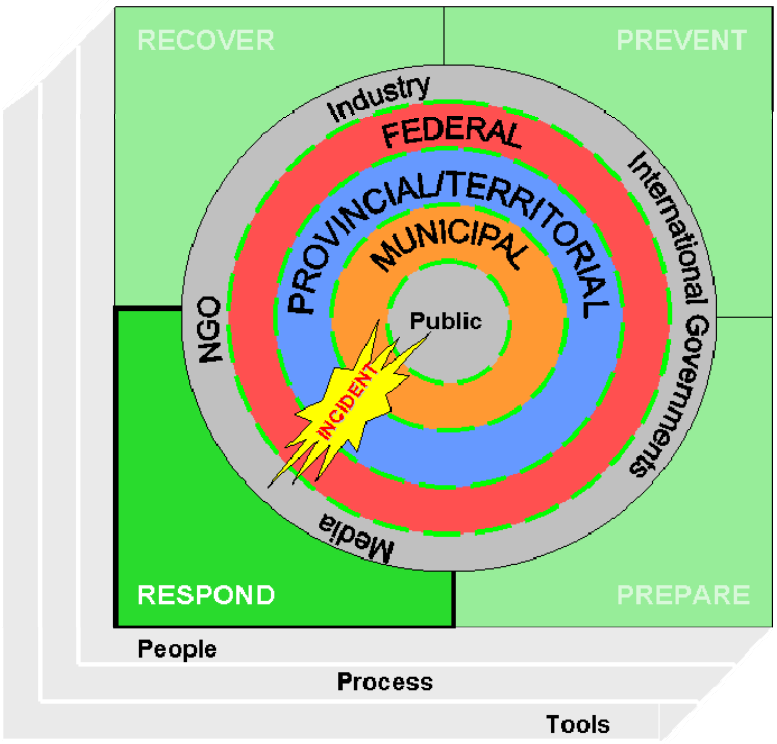

Figure 5 PSTP Canadian EM Generic Response OV-1

3.1.2 Operational View 2 (OV-2) Operational Node Connectivity Description

The objective of the OV-2 graphic and supporting documentation is to capture the key players and the interactions necessary to conduct the corresponding operational activities detailed in OV-5 – Operational Activity Model. The following product description is taken from the DoD Architectural Framework, Volume II:

1. Product Definition. The Operational Node Connectivity Description graphically depicts the operational nodes (or organizations) with needlines between those nodes that indicate a need to exchange information. The graphic includes internal operational nodes (internal to the architecture) as well as external nodes.

2. Product Purpose. OV-2 is intended to track the need to exchange information from specific operational nodes (that play a key role in the architecture) to others. OV-2 does not depict the connectivity between the nodes.

The OV-2 depicts the relationships between Operational Nodes (Elements) and Needlines (Information Exchanges). As per the DoD Architectural Framework, Volume II, these classes are defined as follows:

Operational Nodes (Elements). An operational node is an element of the operational architecture that produces, consumes, or processes information. An operational node includes, but is not limited to, representing an operational/human role (e.g., Incident Commander), an organisation (e.g., Public Safety Canada, British Columbia Provincial Emergency Preparedness Office, etc) or organisation type, i.e., a logical or functional grouping (e.g., Logistics Node, Intelligence Node). The notion of operational node will also vary depending on the level of detail addressed by the architecture effort.

Needlines(Information Exchanges). A needline documents the requirement to exchange information between nodes. The needline does not indicate how the information transfer is implemented.

In accordance with DODAF guidelines, Operational Elements (OE) can be represented as any kind of object (e.g. oval). Needlines between OEs are represented by lines with arrows (indicating the direction of information flow). It is important to note that the arrows on the diagram represent needlines only. This means that each arrow indicates only that there exists a need for information transfer between the two connected nodes.

It is important to note that the OV-2 is often created in tandem with Operational View 5 (OV-5) Operation Activity Models. An OV-5 places primary attention on operational activities and secondary attention on nodes, which can be shown as annotations on the activities. The OV-2, in effect, turns OV-5 inside-out by focusing on the operational nodes and subsequently on the activities.

3.1.2.1 OV-2 Elements

The OV-2 leverages the JCDS21/CFEC C&S work to define operational nodes and needlines. These have been captured in the PSTP Generic EM OV-2 with emphasis on the federal government as depicted in the FERP.

The number of nodes and the resulting collaboration needlines that are involved in a generic representation of emergency response is vast. To help manage the large variety, the operational nodes in each OV-2 diagram have been grouped into categories and a legend has been developed to assist the visual distinction of the various nodes:

- Incident Command – The incident command nodes denote where the execution of command and control resides, for example, in the primary lead agency. These nodes are usually internal to another node, such as primary lead agency. These nodes are coloured pink. The outline colour will denote if they are federal, provincial, municipal or non-government departments/organisations.
- EOC – The Emergency Operations Centre nodes denote the existence of an EOC. These nodes are usually internal to another node, such as primary lead agency. These nodes are coloured yellow. The outline colour will denote if they are federal, provincial, municipal or non-government departments/organisations.
- Liaison Officer – The liaison officer nodes call attention to the role that the liaison officers play in collaboration between nodes. These nodes are usually internal to another node, such as primary lead agency. These nodes are coloured light blue. The outline colour will denote if they are federal, provincial, municipal or non-government departments/organisations.
- External Organisation – External organisation nodes are nodes that are included in an OV-2 diagram to show linkages, but are external to the actual purpose of the OV-2 diagram. These nodes are coloured white with grey outline.
- Federal Government Department – The federal government department nodes are outlined in red.
- Provincial Government Department – The provincial government department nodes are outlined in dark blue.
- Municipal Government Department – The municipal government department nodes are outlined in orange.
- Non-Government Stakeholder – The non-government stakeholder nodes include entities such as industry, media, public, volunteers etc. These nodes are outlined in green.
- May or May-not be co-located – Nodes such as liaison officers may be co-located within another node separate to their parent. For example, a liaison officer from a support department may be co-located in a provincial or municipal EOC or within the emergency management organisation of the primary lead department. The nodes that may or may-not be co-located are illustrated by a dotted line outline.
- External Federal Government Department – The external federal government department nodes are federal government nodes that are included in an OV-2 diagram to show linkages, but are external to the actual purpose of the OV-2 diagram.

- External Provincial Government Department - The external provincial government department nodes are provincial government nodes that are included in an OV-2 diagram to show linkages, but are external to the actual purpose of the OV-2 diagram.
- External Municipal Government Department - The external municipal government department nodes are municipal government nodes that are included in an OV-2 diagram to show linkages, but are external to the actual purpose of the OV-2 diagram.
- External Non-Government Organisation - The external NGOt nodes are NGO nodes that are included in an OV-2 diagram to show linkages, but are external to the actual purpose of the OV-2 diagram.

The following figure illustrates the legend detail as it appears in the SA OV-2 diagrams:

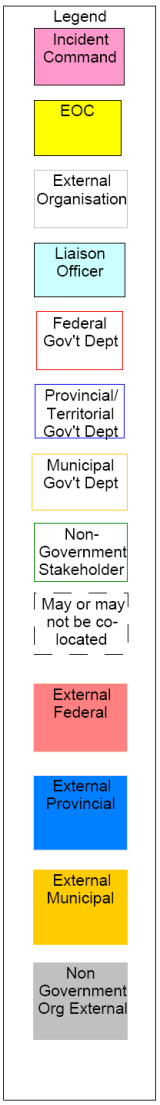

Figure 6 PSTP Canadian EM Generic Response OV-2 Legend

3.1.2.2 OV-2 Product

The OV-2 product consists of a series of diagrams that present a generic representation of federal, provincial/territorial and municipal stakeholders in an all-hazard environment. This section will present a sample of the OV-2 diagrams that are included in the OV-2 product. The full set of the OV-2 diagrams is provided in Annex C of this document. Instructions on how to navigate the

OV-2 diagrams in SA is provided in Annex F, section F.2 and Annex G, section G.2 of this document.

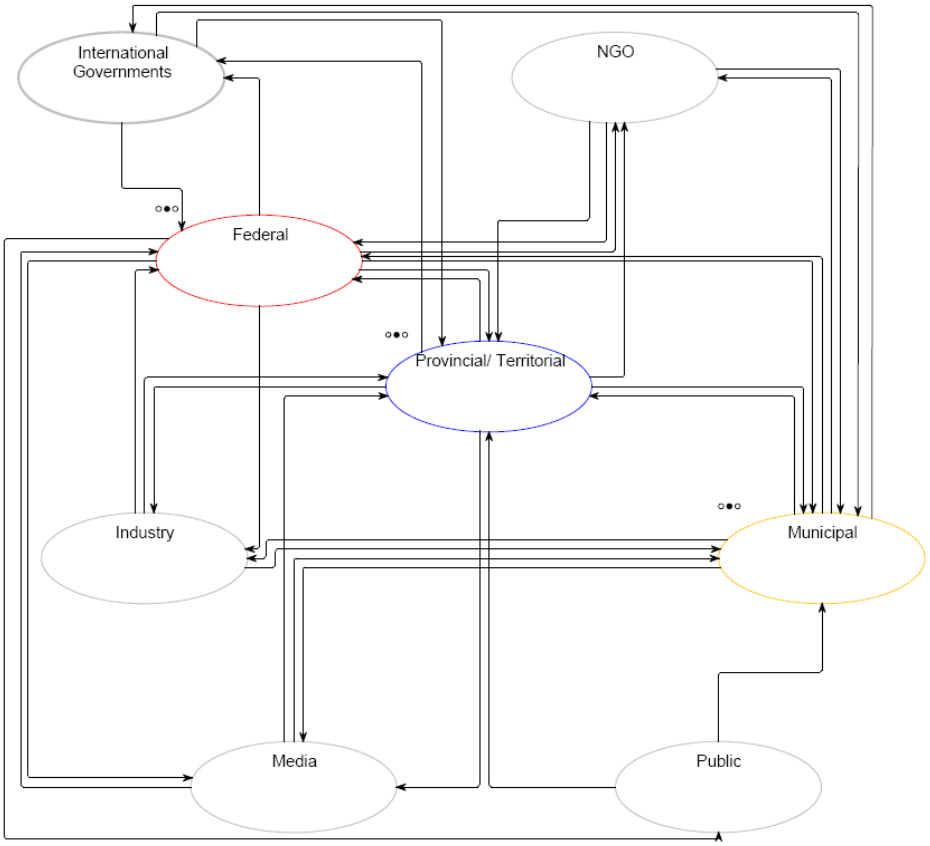

Figure 7 PSTP Canadian EM Generic Response OV-2 Top Level

The symbol: ○●○ on the diagram denotes the operational nodes that have child diagrams detailing lower level data. For example, the Federal operational node has been decomposed in the following figure:

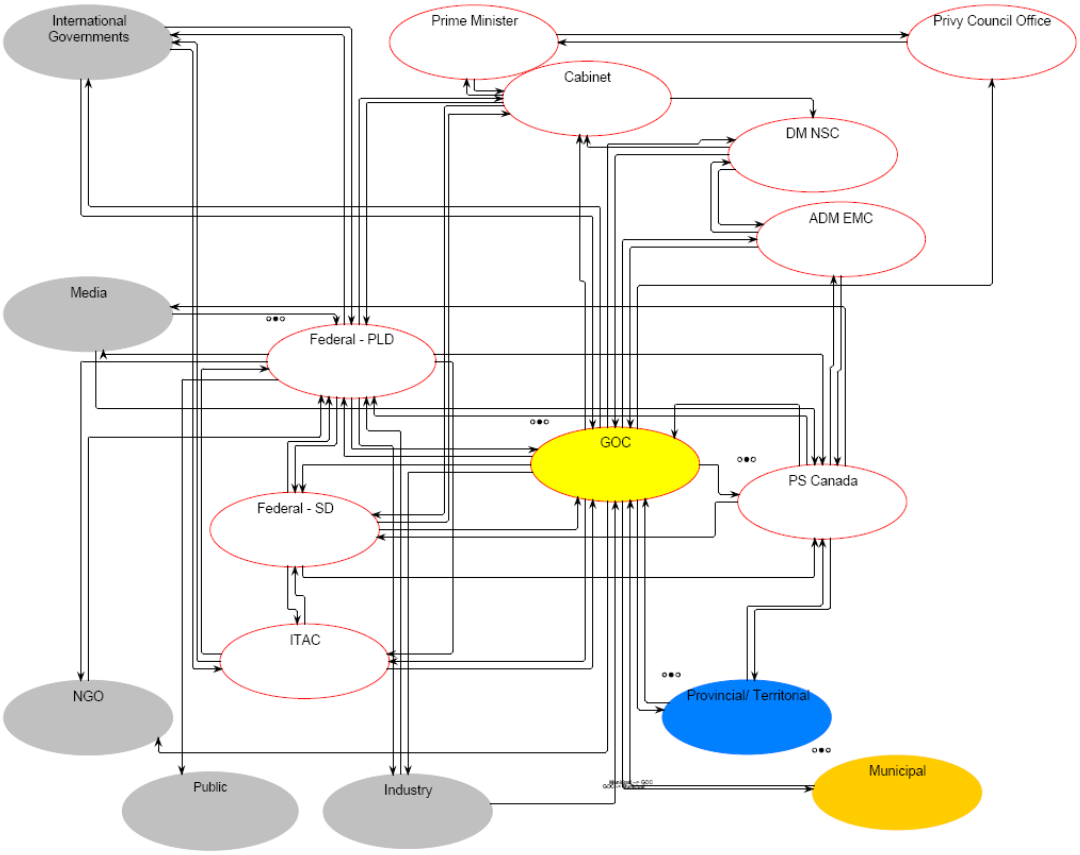

Figure 8 PSTP Canadian EM Generic Response OV-2 Federal Top Level

Further decomposition in a lower level child diagram is indicated of the Federal-PLD, GOC and PS Canada nodes (the provincial/territorial and municipal node decomposition is not a sub-set of the federal). The GOC has been decomposed as child diagram of the Federal Top Level in the following figure:

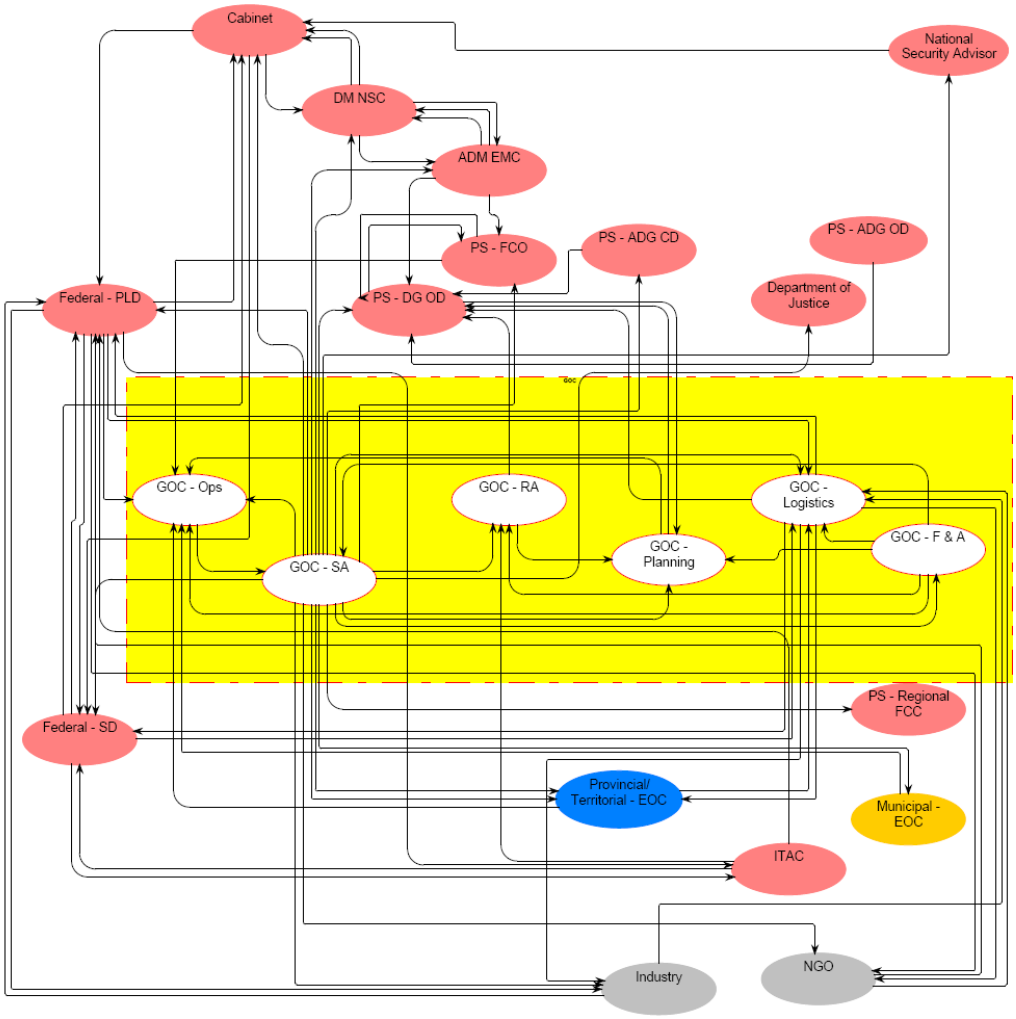

Figure 9 PSTP Canadian EM Generic Response OV-2-GOC

3.1.3 Operational View 3 (OV-3) Operational Information Exchange Matrix.

The mapping of the information exchanges to the needlines of OV-2 occurs in the OV-3. For example, OV-2 connects two operation nodes with needlines. The needline may represent one or more information exchanges, consisting of various types of reports (information elements), and their attributes (such as periodicity and timeliness) that connect the two operational nodes. The identity of the individual information elements and their attributes are documented in the OV-3.

The emphasis in this product is on the logical and operational characteristics of the information. It is important to note that OV-3 is not intended to be an exhaustive listing of all the details contained in every information exchange of every operational node associated with the architecture in question. Nor should the production of such a matrix be considered sufficient to replace an integrated architecture development effort. Rather, this product is intended to capture the most important aspects of selected information exchanges as relevant to the objectives of the architecture. The following description is taken from the DoD Architectural Framework, Volume II:

1. Product Definition. The Operational Information Exchange Matrix details information exchanges and identifies "who exchanges what information, with whom, why the information is necessary, and how the information exchange must occur"[6] There is not a one-to-one mapping of OV-3 information exchanges to OV-2 needlines; rather, many individual information exchanges may be associated with one needline.

2. Product Purpose. Information exchanges express the relationship across the three basic architecture data elements of an OV (operational activities, operational nodes, and information flow) with a focus on the specific aspects of the information flow and the information content.

3.1.3.1 OV-3 Elements

An OV-3 product may contain a wide range of information. The SA OV-3 template accommodates the inclusion of the following data elements:

- Need Line
- Information Exchange
- Source Node
- Source Owning Organization
- Source Activity
- Destination Node
- Destination Owning Organization
- Destination Activity
- Referenced Data
- Purpose / Trigger Event
- Mission/Scenario
- Language
- Content

[6] US DoD Chairman of the Joint Chiefs of Staff Instruction Interoperability and Supportability of Information Technology and National Security Systems, (CJCSI 6212.01B). May 2000.

- Size/Units
- Media
- Collaborative or One-Way
- Levels of Information Systems Interoperability (LISI) Level Required
- Frequency
- Timeliness
- Throughput
- Other
- Classification/Declassification Restrictions
- Criticality/Priority
- Integrity Checks Required
- Assured Authorization to Send/Receive
- Physical
- Electronic
- Political/Economic
- Weather
- Terrain
- Policy/Doctrine Constraints
- Reference Documents

Due to the dynamics of emergency response, the nature of transactions is often scenario dependent and thus it is difficult to capture generic data to fully complete an OV-3 product. Therefore, the OV-3 presented in this project demonstrates the type of information that can be portrayed in an OV-3, illustrates how the OV-3 maps to the OV-2 operational nodes and OV-5 activities and provides a tool for future data collection. This will aid more in-depth decomposition of the information exchange elements as the work is expanded and/or enhanced through scenario specific data collection and/or validation activities with the appropriate stakeholders.

3.1.3.2 OV-3 Product

Within SA, the OV-3 is presented in tabular format and can be exported into MS Excel. A sample of the generic OV-3 product is presented in this section. An excel table with the areas for which information has been completed for this project is attached in Annex D.

Information Exchange	Source Node	Source Activity	Destination Node	Destination Activity
Resource mobilisation	GOC - Logistics		Federal - PLD	
Resource mobilisation	GOC - Logistics		Federal - SD	
Resource mobilisation	GOC - Logistics		Industry	
Resource mobilisation	GOC - Logistics		NGO	
Validated info for SA (Ops - SA)	GOC - Ops	GOC Ops Facilitate Operations GOC OPs provides 24/7 monitoring, validating and reporting	GOC - SA	GOC SA Facilitate SA GOC SA review, analyse and synthesize info from multiple sources
Action Plan Task Matrix	GOC - Planning	Develop Action Plan Task Matrix with dept reps GOC Planning Facilitates Planning	PS - DG OD	DG OD Manage GOC Provide Planning Guidance to GOC - Planning
Advance Plan	GOC - Planning		PS - DG OD	
Contingency Plan	GOC - Planning	GOC Planning Facilitates Planning Develop objectives, COA for Contigency Plan	PS - DG OD	
Incident Action Plan	GOC - Planning		GOC - Ops	
Incident Action Plan	GOC - Planning		PS - DG OD	
Risk Assessment Report	GOC - RA	Provide Risk Assessment Report to DG OD for PS Canada GOC RA Facilitates RA	GOC - Planning	GOC Planning Facilitates Planning Develop objectives, COA for Action Plan
Risk Assessment Report	GOC - RA	Provide Risk Assessment Report to DG OD for PS Canada GOC RA Facilitates RA	PS - DG OD	DG OD receives RAR - request SA or provide for planning DG OD Manage GOC
Decision Brief	GOC - SA	Communicate information to decision-makers through SA product-Decision Brief GOC SA Facilitate SA	ADM EMC	ADM EMC receives GOC SA Products ADM EMC provides EM guidance
Sit Rep (GOC SA)	GOC - SA	GOC SA communicates information to decision-makers through SA product - Sit Rep GOC SA Facilitate SA	GOC - Ops	GOC Ops receive, prioritise, distribute and log all classified & unclass docs GOC Ops Facilitate Operations
Sit Rep (GOC SA)	GOC - SA	GOC SA communicates information to decision-makers through SA product - Sit Rep GOC SA Facilitate SA	GOC - Planning	GOC Planning Facilitates Planning Develop objectives, COA for Action Plan
Sit Rep (GOC SA)	GOC - SA	GOC SA communicates information to decision-makers through SA product - Sit Rep GOC SA Facilitate SA	ADM EMC	ADM EMC receives GOC SA Products ADM EMC provides EM guidance
Sit Rep (GOC SA)	GOC - SA	GOC SA communicates information to decision-makers through SA product - Sit Rep GOC SA Facilitate SA	Federal - SD	Federal SD Supports EM
Sit Rep (GOC SA)	GOC - SA	GOC SA communicates information to decision-makers through SA product - Sit Rep GOC SA Facilitate SA	PS - Regional FCC	FCC receives Sit Rep from GOC SA FCC Coordinates EM
Sit Rep (GOC SA)	GOC - SA	GOC SA communicates information to decision-makers through SA product - Sit Rep GOC SA Facilitate SA	Department of Justice	DOJ Provides legal guidance
Sit Rep (GOC SA)	GOC - SA	GOC SA communicates information to decision-makers through SA product - Sit Rep GOC SA Facilitate SA	Cabinet	Cabinet oversees EM
Sit Rep (GOC SA)	GOC - SA	GOC SA communicates information to decision-makers through SA product - Sit Rep GOC SA Facilitate SA	National Security Advisor	Provide information, advice and recommendations to the PM NSA Provides EM Guidlines
Sit Rep (GOC SA)	GOC - SA	GOC SA communicates information to decision-makers through SA product - Sit Rep GOC SA Facilitate SA	PS - FCO	FCO coordinates federal emergency response

Figure 10 PSTP EM Generic Response OV-3 Sample Data

3.1.4 Operational View 4 (OV-4) Organizational Relationships Chart

The objective of the OV-4 graphic and supporting documentation is to capture the command relationships between the key players. The following description is taken from the DoD Architectural Framework, Volume II:

1. Product Definition. The Organisational Relationships Chart illustrates the command structure or relationships (as opposed to relationships with respect to a business process flow) among human roles, organizations, or organisation types that are the key players in an architecture.

2. Product Purpose. This product clarifies the various relationships that can exist between organizations and sub-organizations within the architecture and between internal and external organizations.

The OV-4 level of analysis documents the organisational relationships between actors, or human nodes, within a system or capability.

When a project is focused on a system, or a given scenario set, there is often only one OV-4 that can easily be drawn, interpreted, and understood. However, when a project must address an overall capability, comprised of systems-of-systems responding to a wide range of scenarios, a hierarchy of OV-4's is required to systematically document the organisational structures.

As the operational envelope for a capability is systematically analyzed across the full range of operational scenarios, the lower levels of an OV-4 hierarchy can be quite broad and complex. Tailoring specific views variants for specific scenarios may be required to make relations clear.

There are two existing OV-4 analysis of emergency management that were reviewed for this project:

1. Existing JCDS21 (FFSE Task 121) project documentation, and

2. Existing CFEC Major Event Operations (MEOps) (FFSE Task 182) project documentation.

As these OV-4 analysis are comprehensive and are generic in their representation, it was determined that these applied as the OV-4 for this project. As with the OV-1, OV-2 and OV-5, this OV-4 provides the baseline for this aspect of the EM process mapping framework.

3.1.4.1 OV-4 Elements

This study leverages the previous emergency management architecture work developed for JCDS21 and CFEC C&S. During the conduct of these projects, three core elements were identified that formulate the structure of the generic relationships that are common in emergency response: legitimizing authority, execution of command and control, and support agencies. These core elements provide structure to both the emergency response framework as a whole as well as to the internal operations of agencies involved in response activities as it can be superimposed over the organisational charts of the government departments and agencies that participate in incident response.

3.1.4.1.1 Emergency Response Organisational Relationships

The OV-4 product considers both these three core elements and the organisational structure of the emergency management entities as follows:

1. Legitimizing Authority.

Top level decision makers provide the authority for the lead agency/department to execute command and control for the emergency response. The legitimizing authority will be dictated by the type of incident that has occurred and the resulting response initiatives that are required. For example, a mayor, premier or the prime minister will divest authority to an interagency coordinating group that will determine the lead agency. For individual agencies involved, their department head, minister or CEO will divest authority to a management team that will determine who will lead their response efforts.

2. Execution of Command and Control.

Execution of command and control for emergency response will be spearheaded by a lead agency that will coordinate and dictate the overall response efforts. At the individual agency level, each department/organisation that is supporting the lead agency will have a lead "project team" to coordinate their response efforts.

3. Support Agencies.

Support agencies will report to the incident commander of the lead agency regardless of which legitimizing authority is in charge. The support agencies involved in the response efforts operate within a matrix structure in such that accountability and control is shared between their functional/departmental organisation and the ad-hoc incident response organisation that is stood up for the response.

A key element to understanding these organisational relationships is the way in which the relationships are in a state of flux – they are temporary in nature both for a specific response and during the course of an incident. How each element is represented is dependant upon the nature of the incident and the current state of reality. As the incident grows or subsides, the roles and responsibilities of municipal, provincial/territorial, federal or international authorities may change and thus a re-alignment of organisational relationships occurs to reflect the situational environment. For example, if a suspected flu outbreak overwhelmed local hospitals, the response would remain under local command despite support being given from provincial and/or federal agencies. If additional regions within a province or territory also became affected, command may be passed to the provincial level. If a number of provinces or territories were affected, or if the suspected flu outbreak turned out to be the result of a terrorist attack using inhalation anthrax, the federal government would take the command lead. In addition, as the response activities begin to be replaced by recover activities, the organisational relationships will once again be re-aligned as the situation merits.

3.1.4.2 OV-4 Product

1. Top Level

The top level OV-4 product defines the hierarchy between the three elements. This structure is repeated in each level of decomposition.

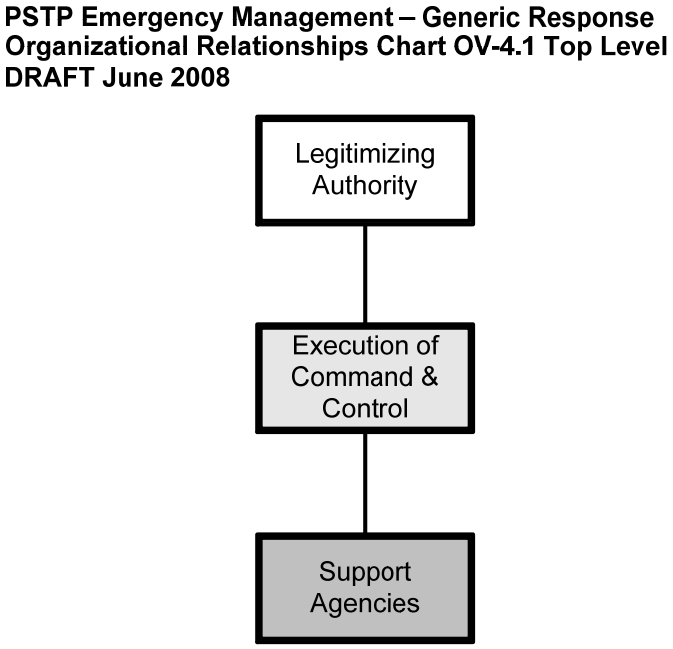

Figure 11 PSTP Canadian EM Generic Response OV-4.1

2. Second Level Decomposition

It is very important to portray that these elements are not represented in static organisational relationships, however, it is very difficult to depict the dynamic nature of relationships within the DoDAF structure. The second level decomposition OV-4 attempts to illustrate the dynamic nature of organisational relationships in emergency response as it presents four different scenarios (municipal, provincial/territorial, national and international) of the decomposition.

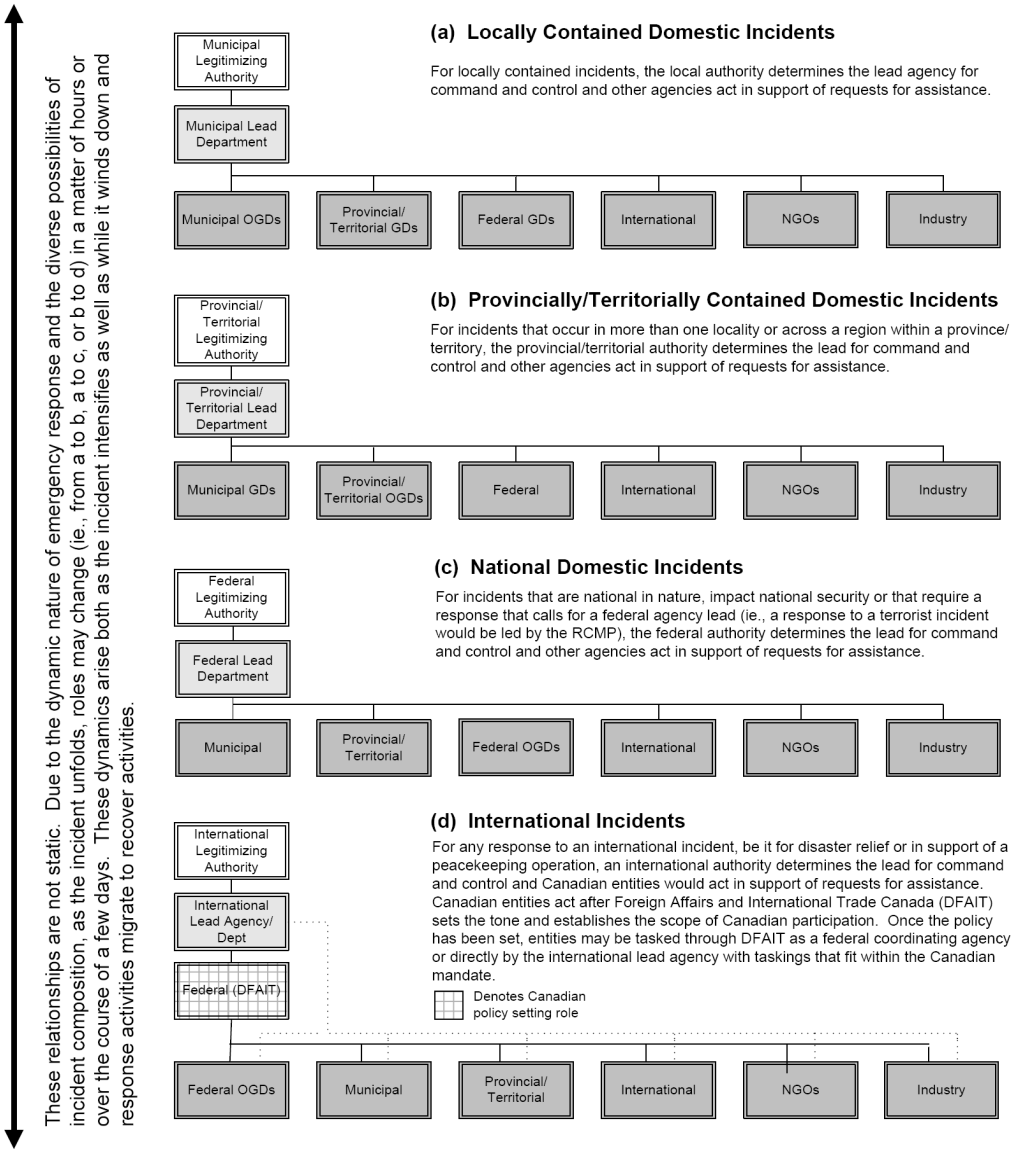

Figure 12 PSTP Canadian EM Generic Response OV-4.2

3. Third Level Decomposition

The third level of decomposition illustrates the lead and support roles that organisations could assume while participating in response operations. As the structure is articulated at this level, the horizontal, vertical and matrix relationships are shown to exist concurrently within each department/agency and across the diverse organizations involved in the multi-agency response environment. Thus, the third level of decomposition illustrates the multi-dimensional relationships which characterise emergency response. The diverse nature, the severity and uniqueness of incidents cause conventional hierarchical management to be replaced by dynamic structures to coordinate resources and execute a response to an incident.

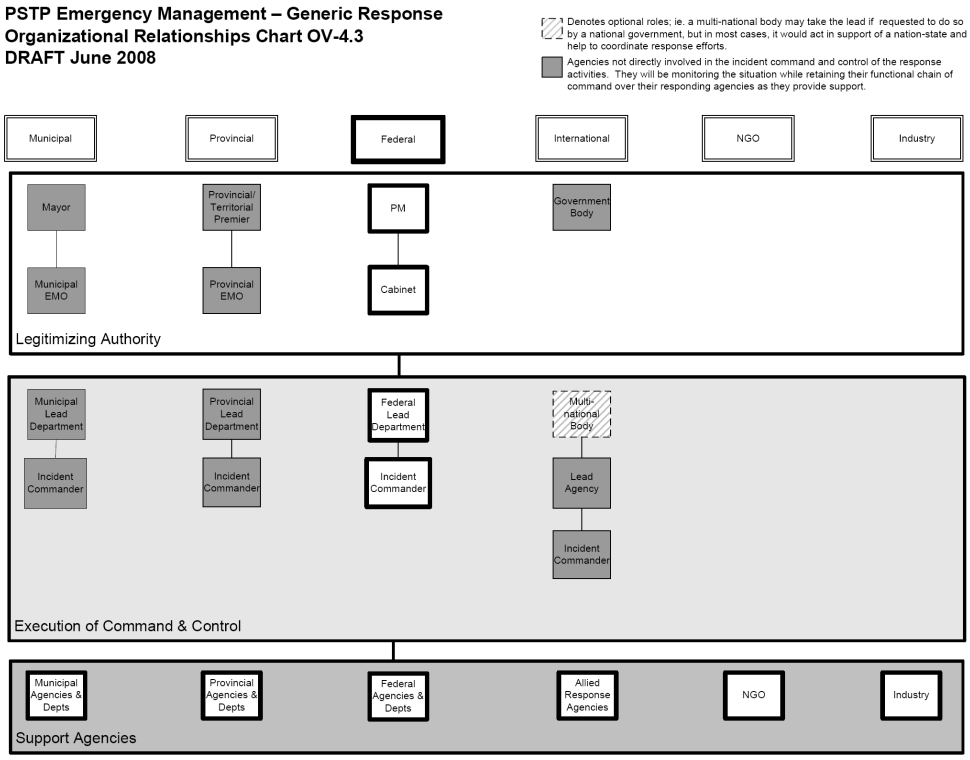

Figure 13 PSTP Canadian EM Generic Response OV-4.3

3.1.5 Operational View 5 (OV-5) Operational Activity Model

The OV-5 Operational Activity Model is described by DoD Architectural Framework, Volume II as the following:

1. Product Definition. The Operational Activity Model describes the operations that are normally conducted in the course of achieving a mission or a business goal. It describes capabilities, operational activities (or tasks), input and output (I/O) flows between activities, and I/O flow s to/from activities that are outside the scope of the architecture. High- level operational activities should trace to (are decompositions of) a Business Area, an Internal Line of Business, and/or a Business Sub-Function as published in OMB's Business Reference Model[7].

2. Product Purpose. OV-5 can be used by the analyst to:

   a. Clearly delineate lines of responsibility for activities when coupled with OV-2;

   b. Uncover unnecessary operational activity redundancy;

   c. Make decisions about streamlining, combining, or omitting activities; and

   d. Define or flag issues, opportunities, or operational activities and their interactions (information flows among the activities) that need to be scrutinized further.

3.1.5.1 OV-5 Elements

The focus of the OV-5 activity modelling effort was to gain an understanding of the role and activities performed by stakeholders involved in emergency response activities. To meet this objective, the following approach was taken utilizing the FERP and TCK as baseline documentation:

1. Generate High-Level Activity Models and Node Trees using the FERP. Specific OV-5 Activity Models and Node Trees depict the activities conducted by stakeholder agencies in the Canadian context. At the top level, the swimlane diagram format was used to illustrate roles and responsibilities while showing linkages between each of the stakeholders involved in the incident and across levels of government. Swimlanes provide a format for organising an activity diagram – each swimlane corresponds to an operational node involved in the activity diagram, thus providing visual linkages to the OV-2 product. Due to the complexity of using this format as more operational nodes and activities are added, activities are presented in lower level decomposition as activity models or node trees without the swimlanes.

2. Generate High-Level Activity Models and Node Trees using the TCL. Specific OV-5 Activity Models and Node Trees depict generic response capabilities that are required to be conducted by stakeholder agencies as defined by the TCL. The TCL includes the following 21 capabilities for EM response:

[7] US Office of Management and Budget, Business Reference Model. June 2003. http://www.whitehouse.gov/omb/egov/documents/fea-brm2.PDF

i. On-site Incident Management

ii. Emergency Operations Centre Management

iii. Critical Resource Logistics and Distribution

iv. Volunteer Management and Donations

v. Responder Safety and Health

vi. Emergency Public Safety and Security

vii. Animal Disease Emergency Support

viii. Environmental Health

ix. Explosive Device Response Operations

x. Fire Incident Response Support

xi. WMD and Hazardous Material Response and Decontamination

xii. Citizen Evacuation and Shelter-In-Place

xiii. Isolation and Quarantine

xiv. Search and Rescue (Land Based)

xv. Emergency Public Information and Warning

xvi. Emergency Triage and Pre-Hospital Treatment

xvii. Medical Surge Capability

xviii. Medical Supplies Management and Distribution

xix. Mass Prophylaxis

xx. Mass Care

xxi. Fatality Management

These OV-5 diagrams capture a standard representation of the capabilities needed to conduct emergency response operations. Applying them as a framework for analysis, lower level activity models can be developed as scenario specific detail is collected. In this way, the products can thus aid in the understanding of emergency response processes, for example: to examine mutual aid agreements (MAA) for sharing resources and uncovering the possible overlapping dependences on emergency services and shelters, etc.; to illustrate incident command handover from emergency response to recovery; to understand connections within specific domains (i.e.

health authorities); to analyse business processes in more than one organisation and/or more than one incident; and to involve aspects of CIP. In addition, scenario specific investigation using these diagrams will reveal the interdependencies of organisations and thus the collaboration required in emergency response operations.

Therefore, that can be used for collecting scenario specific data regarding stakeholders and hazards across the response environment.

OV-5 products may also be used to facilitate understanding of the overlap between the emergency management components of prepare, prevent, respond and recover. This type of analysis could aid in understanding the sharing of resources, staging resources and developing event specific contingency plans.

3.1.5.2 OV-5 Product

The OV-5 product is a series of diagrams that depict activities conducted in emergency response using two formats: node tree and activity model. To ease the flow of this document, this section contains a selection of the diagrams that are contained in the OV-5 product. The complete set of diagrams is included in Annex E of this document. Instructions on how to navigate through the OV-5 diagrams in SA is provided in Annex F, sections F.3 (FERP diagrams) and F.4 (TCL diagrams) and Annex G, sections G.3 (FERP diagrams) and G.4 (TCL diagrams) of this document.

3.1.5.2.1 OV-5 FERP Diagrams

The FERP as been used as the main guidance document for the development of the following diagrams. The review of provincial and municipal emergency response plans contributed in a minor role, augmenting detail at these levels that are not covered by the FERP.

The first diagram captures a high level view of the activities involved in the Canadian EM response environment, such as conduct and support response efforts:

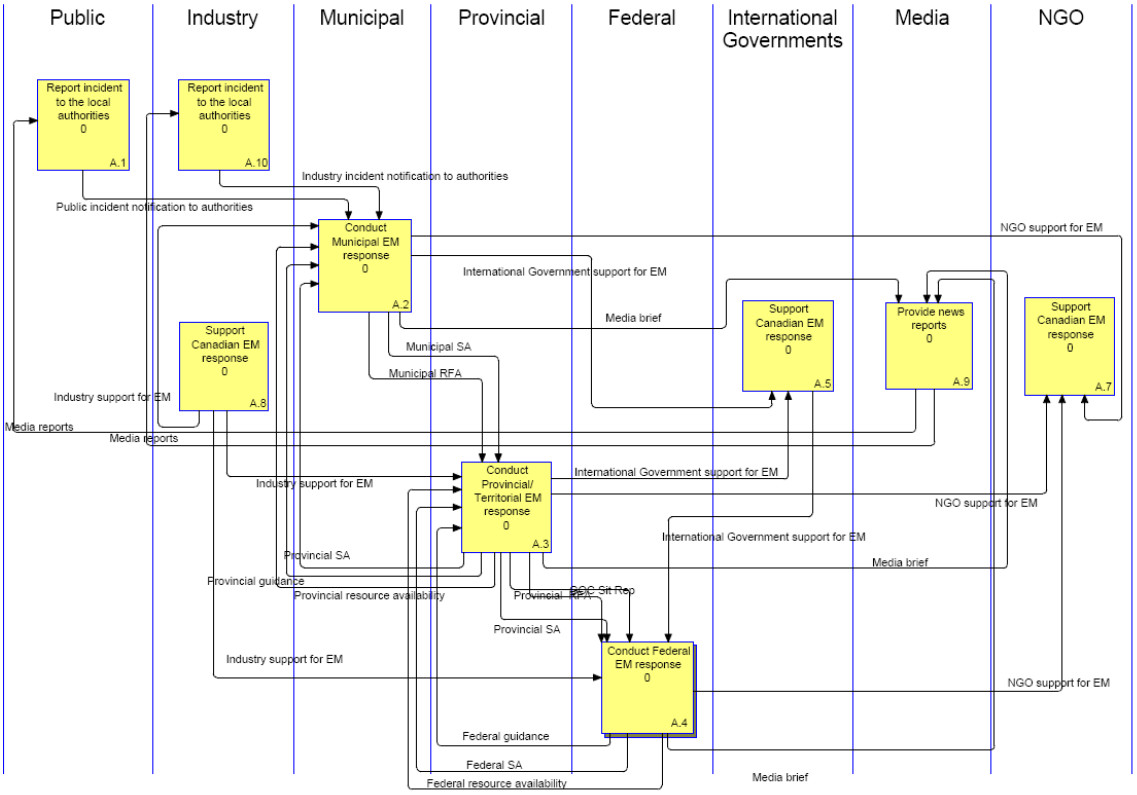

Figure 14 PSTP Canadian EM Generic Response OV-5 Top Level

Similar to the OV-2, activities are linked to child diagrams detailing lower level data. In the OV-5, the activities that are shadowed are decomposed to a lower level. For example, Conduct Federal EM Response is illustrated in the following figure:

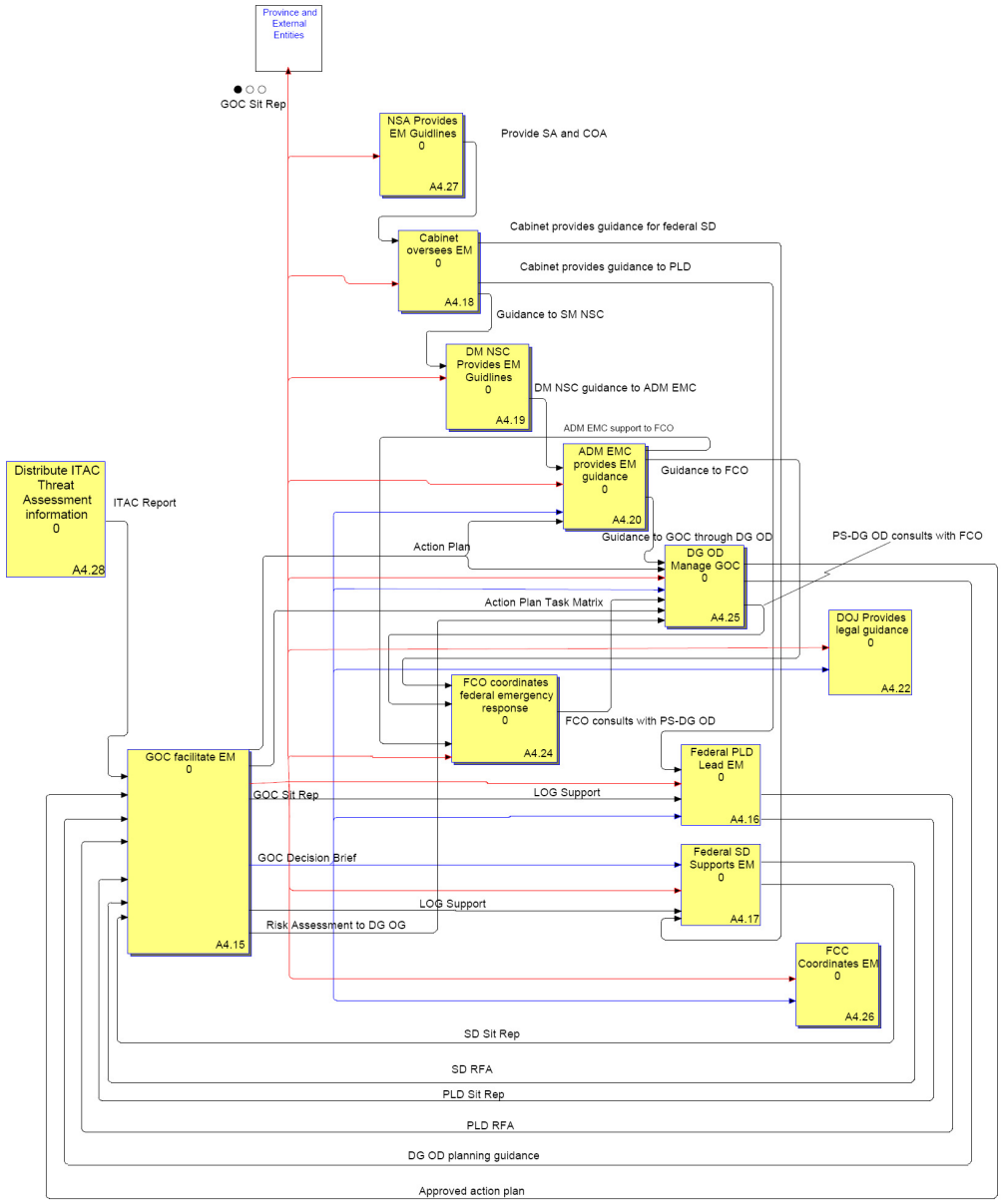

Figure 15 PSTP Canadian EM Generic Response OV-5 Federal Conduct EM Response

Drilling down into the mapping, further decomposition of the GOC details the Operations, Situation Awareness, Logistics, Planning, Finance and Administration and Risk Assessment cells:

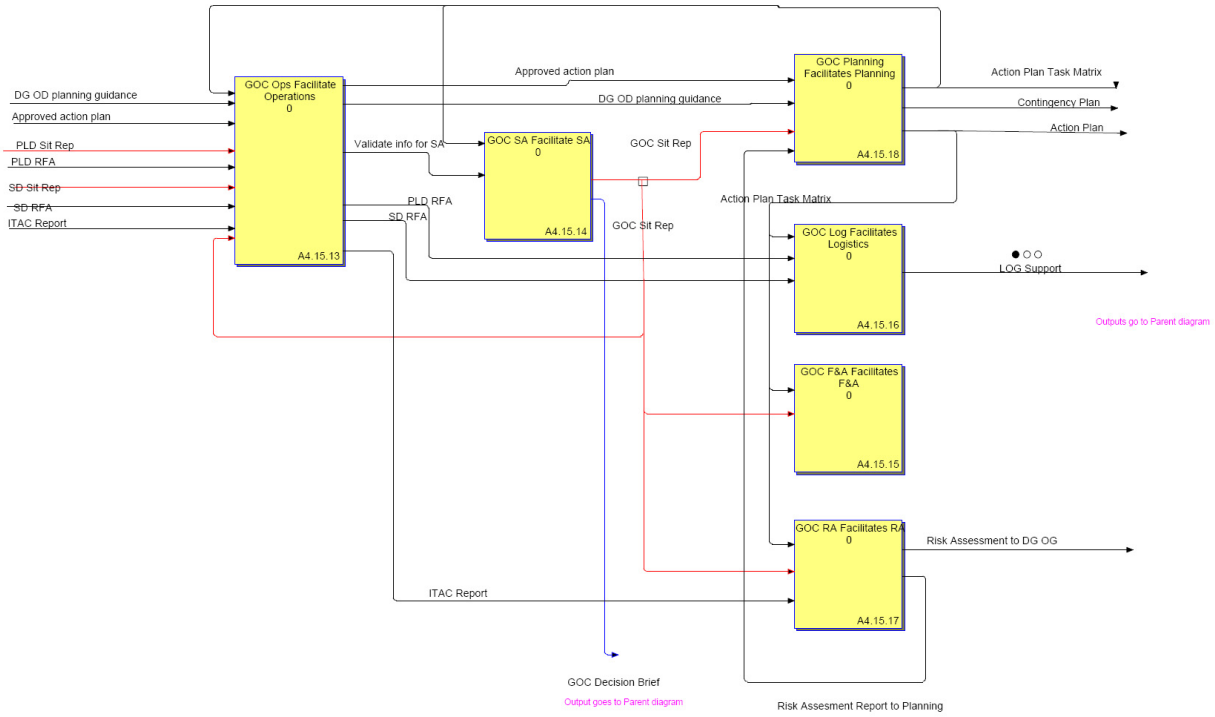

Figure 16 PSTP Canadian EM Generic Response OV-5 GOC Facilitate EM Response

When process flow was unknown, a node tree was used to document specific activities. For example, decomposition of the GOC Operations cell is presented using a node tree:

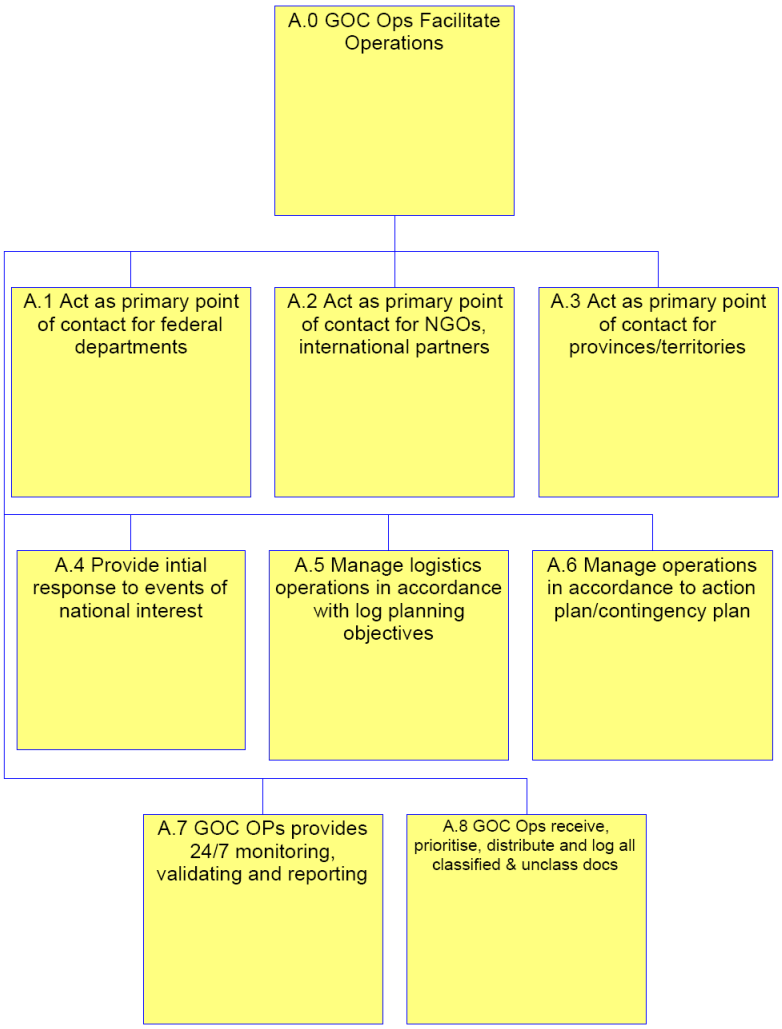

Figure 17 PSTP Canadian EM Generic Response OV-5 GOC Operations

3.1.5.2.2 OV-5 TCL Diagrams

Ownership of activities is not defined in the OV-5 product that is based on the TCL. Therefore, the following diagrams can be used for analysis of all levels of government, and stakeholder organisations for all hazards.

Similar to the OV-2, a legend has been developed to assist the visual distinction of the various elements contained with the OV-5 diagrams representing the TCL. This legend helps the viewer to distigush between activities that are internal to the capabilities represented by a specific OV-5 diagram and those that the capability is linked to (external to a specific OV-5, either as a separate response capability or a prevent, protect or recovery capability). The OV-5 TCL elements have been categorised as follows:

- Response Mission Area Target Capabilities Internal – The response mission area target capabilities that are internal to an OV-5 diagram are depicted in blue.
- Response Mission Area Target Capabilities External – The response mission area target capabilities that are linked to but external to an OV-5 diagram are depicted in grey.
- Prevent Mission Area Target Capabilities – The prevent mission area target capabilities that are linked to but external to an OV-5 diagram are depicted in orange.
- Protect Mission Area Target Capabilities - The protect mission area target capabilities that are linked to but external to an OV-5 diagram are depicted in pink.
- Recovery Mission Area Target Capabilities - The recovery mission area target capabilities that are linked to but external to an OV-5 diagram are depicted in green.
- All Response Mission Area Target Capabilities - The response mission area target capabilities that are linked to and common across all response capabilities are depicted in light blue.

Figure 18 PSTP Canadian EM Generic Response OV-5 TCL Legend

The OV-5 TCL diagrams are introduced with a high level depiction of all the 21 response mission area capabilities. Each capability is numbered according to its order in the TCL and Response C0 represents "Response Capability 0", the top level diagram illustrating all response capabilities. This numbering continues throughout the OV-5 TCL diagram, assisting navigation and has been explained in section 3.1.5.1 above.

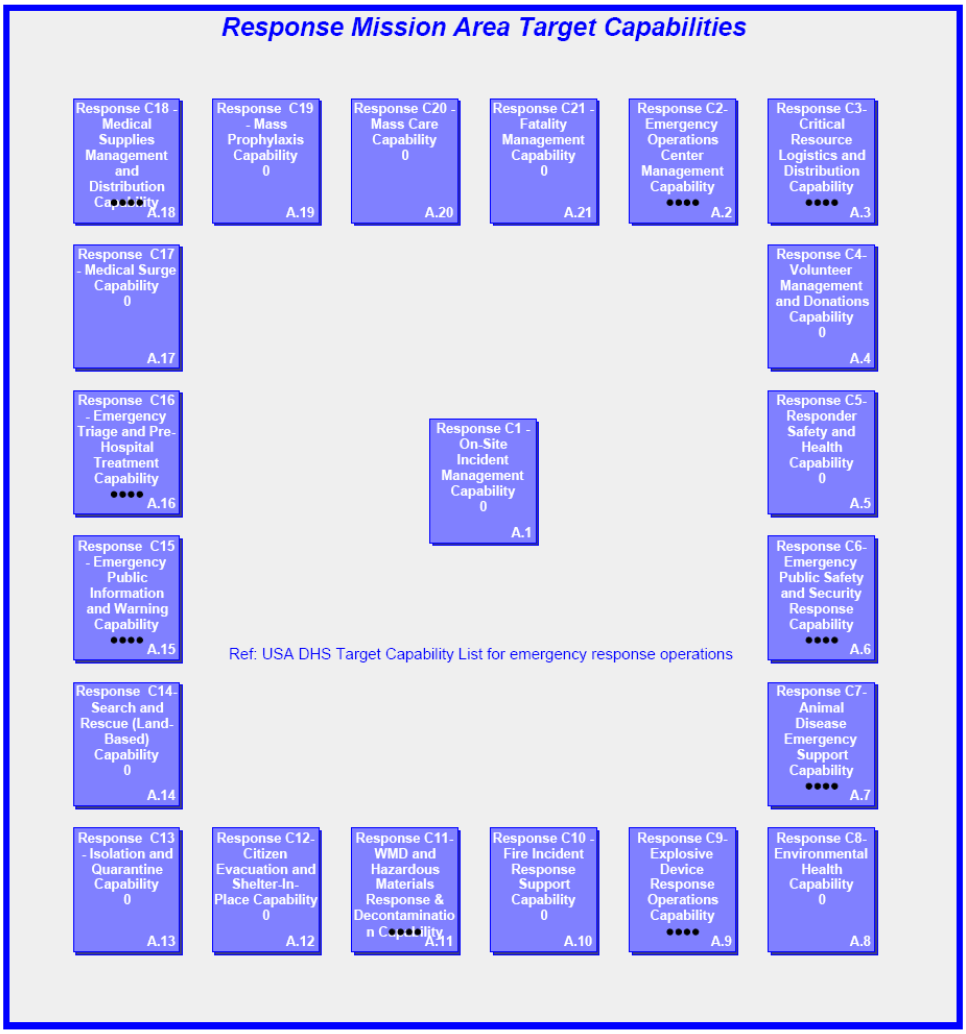

Figure 19 PSTP Response Generic Capability OV-5 TCL Top Level

Child diagrams have been developed to decompose each of the top level capabilities. The shading of each of the boxes in figure 19 indicate an OV-5 child diagram. For example, the following figure decomposes the second response capability, EOC Management Capability:

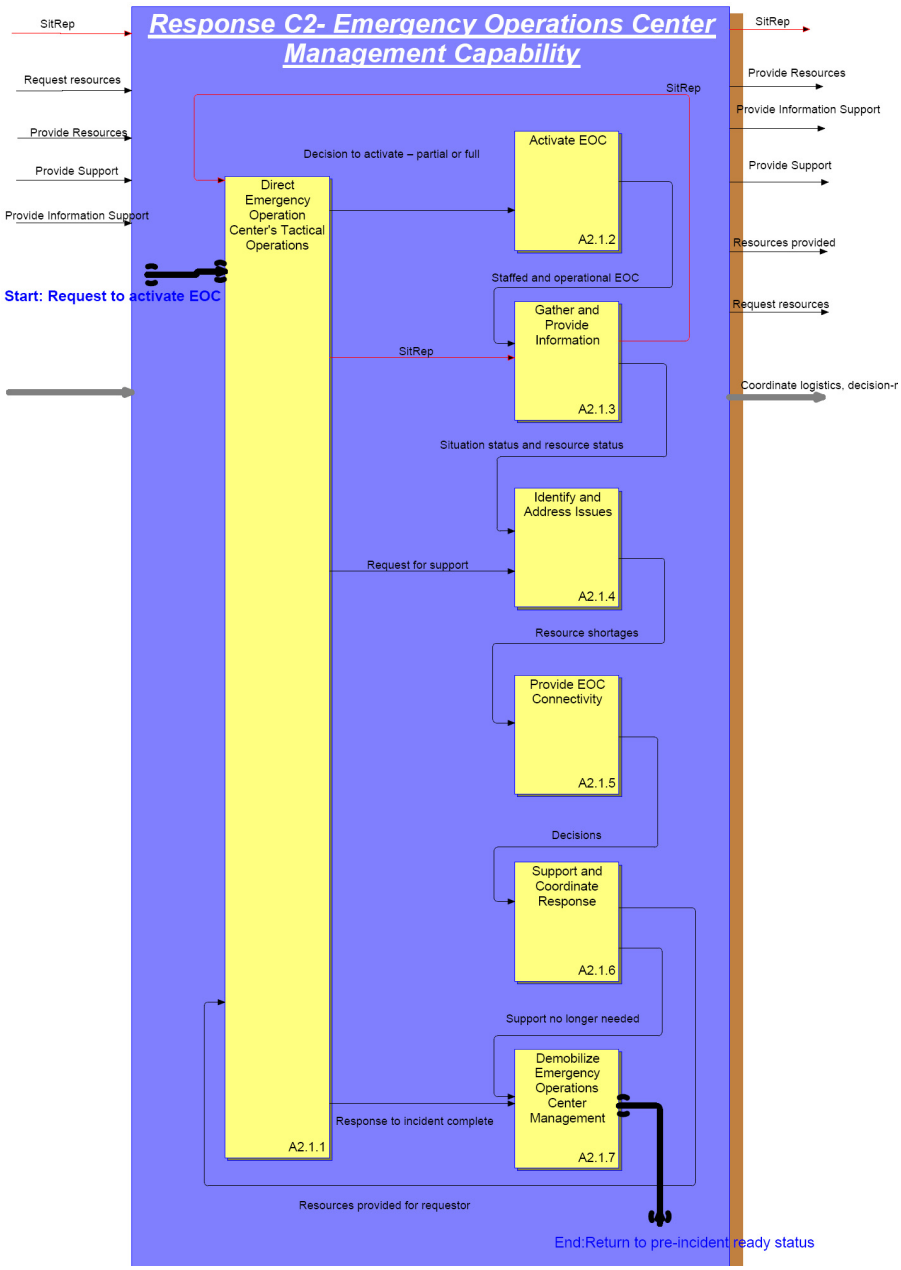

Figure 20 PSTP Response Generic Capability OV-5 TCL EOC Management

The inputs and outputs are linked to other capabilities in the OV-5 EOC Management Links to Other Capabilities:

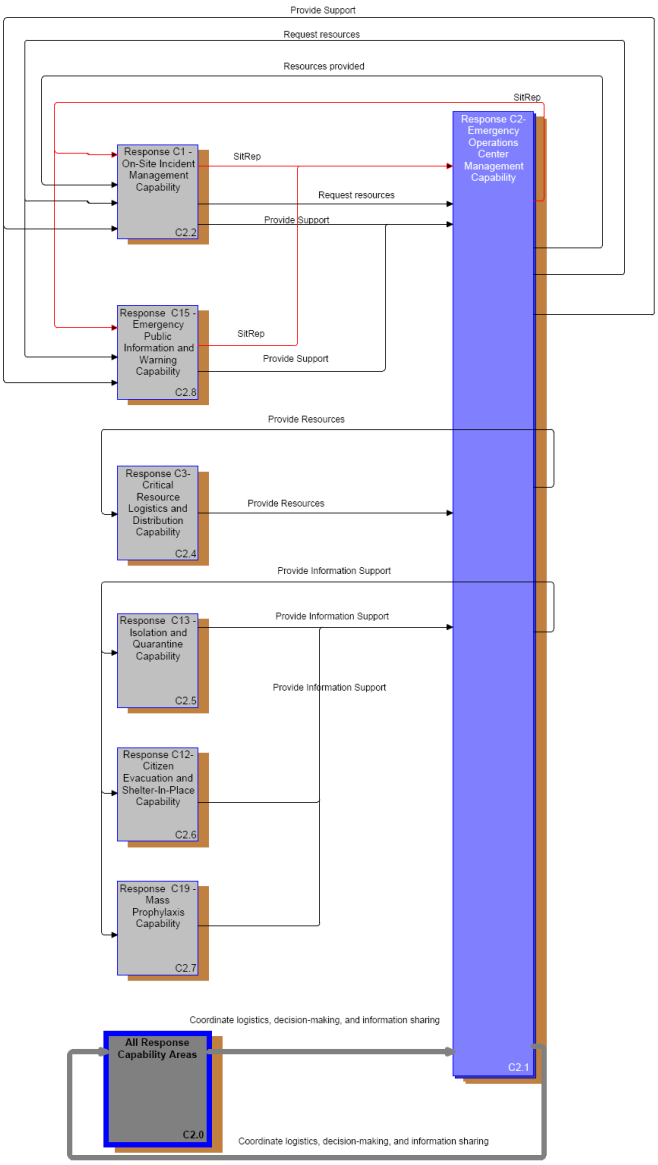

Figure 21 PSTP Response Generic Capability OV-5 TCL EOC Management Links to Other Capabilities

3.2 System Architect®

The use of SA provided a tool for a data repository and diagram generation and presentation.

3.2.1 Data Repository

The data collected and reviewed for this project came from multiple and disparate sources. These sources are not static – documents like Emergency Response Plans (ERPs) evolve as they build on lessons learned. The creation of new organisations and/or the discovery of new hazards also alter their evolution paths. In addition, retrieving the detail important for understanding EM process mapping required a sustained effort. Thus, it was determined that a repository to store and maintain the data was essential. Requirements for such a repository included the ability to store the data in a digital format, the ability to update material over time and enable the data to be accessible as a reference tool. SA provided such an environment and it was deemed appropriate to use it for such a purpose.

The All Views-2 (AV-2) Integrated Data Dictionary contains an output of the data elements captured in the SA database and is presented as a Glossary with the annexes of this document. The AV-2 lists the name, description and data element type for each entry in the SA database.

3.2.2 Diagram Generation and Presentation

The previous section 3.1 presents the architecture products that were created in SA. These products were generated using the data elements contained in the repository of the tool. The outputs of SA, the diagrams, are available in HTML format. The HTML application allows ease of navigation through the diagrams without the need of the SA software. SA generates the diagrams into HTML in two different formats, JPEG and SVG. Annex F (SVG) and Annex G (JPEG) of this document contain documentation on how to navigate both formats used in the HTML application for the presentation of the diagrams.

4 Conclusion

This project has produced a series of architecture products that characterise high level generic emergency management response processes situated in an all-hazards environment. These products combine together to form a generic all-hazards framework that provide a baseline for further research of the application of S&T in the area of emergency management. Using the products as templates, investigation with stakeholders will enable the capture of specific processes for a geographical region, an organisation and/or a hazard with a comprehensive and standard framework.

4.1 Regional Data

Attempts were made to collect and incorporate data for specific regions in Canada. The data was collected but time did not permit it all to be inputted into SA repository nor to create regional diagrams. The regions for which data were collected include: Toronto, Ottawa, Ontario, Vancouver, British Columbia, Halifax and Nova Scotia. The AV-2 project glossary indicates what information has been entered into the database and can serve as a starting point for completing this work in follow-on projects. The reference documents collected during the data collection phase for these regions are included with the project deliverables on a project CD. A list of these documents is included in the bibliography.

4.2 System Architect Lesson Learned

Arriving at the project end state was not always smooth sailing. It is necessary here to include a couple points of reference for future projects that will leverage this work concerning the tool, System Architect. Every tool has its positive and negative aspects, however, it was discovered that some of the finer points of SA were challenging. These are presented here to aid future users and to ensure that expectations of the tools' ability are kept in check.

Various challenges with using the System Architect application have been faced. These have been presented to the project Scientific Authority and include:

- Designing products for SA and utilizing HTML output requires an understanding of some of the little and often hidden aspects of SA. Initial development efforts may be more time consuming. Prototypes of the diagrams should be utilised to ensure that the design will be able to be executed within SA and meet project requirements.
- The swimlane feature for OV-5 has been proven to be very beneficial to understanding stakeholders and activities in complex environments. However, the SA swimlane format is difficult to apply and makes this diagram option challenging.
- Using automated features (such as balancing and creating one product from another) requires in-depth knowledge of specific fine details of how SA works. These features also need to be fully understood before automated features are applied as they can constrain/ confuse design.

- Integration between the database and the diagrams within SA is not automatic – often both have to be manipulated, for example deleting a definition does not delete its corresponding symbol. The symbol must also be deleted from the diagram. Likewise, deleting a symbol from a diagram does not delete the corresponding definition. The definition must also be deleted as a separate action from the encyclopedia.
- Display features can be changed but it is not intuitive and can be time consuming.

5 Next Steps

This project has been the first attempt at mapping EM processes. The objectives were focused, but the domain is vast. As such, there are a few areas where the generic framework can be enhanced:

- Expand the generic TCL response data to include those of prepare, prevent and recover to create an all-encompassing emergency management framework.
- Conduct validation exercises with main stakeholders captured in the generic framework, such as the GOC and PS Canada (national and regional offices).

5.1 Stakeholder Engagement – User and Scenario Driven Enhancement

A number of areas (hazards, organisations, levels of government, regions, emergency management capability areas, etc.) can be explored using the outputs of this project for a variety of purposes (knowledge expansion, comparison studies, S&T application, etc). Engagement with stakeholders to collect data and validate scenario specific details as well as to direct scenario focus is a requirement for all. Engagement activities may include interviews, targeted literature review and/or observation (i.e. of exercises or day-to-day functioning of and EOC). The approach must ensure that the people, process and tools that enable emergency management operations will be fully encapsulated.

5.2 Research and Analysis

As architecture is developed for a specific hazard response, a specific department (lead or support) or a specific region (municipality/province/territory/national), the data repository and diagrams will be updated and the process map will evolve into a comprehensive and robust research and analysis tool to:

1. Develop an understanding of emergency management capabilities in Canada. The analyst will be able to determine characteristics of a capability and to refine the model for the Canadian context. Through this type of analysis, the following questions could be investigated: why a capability is needed; how the capability will be used; what function the capability will perform; who will need the capability; when the capability will be available; what key performance and other attributes comprise the capability; how the capability will be supported; what skills will be required and how to ensure training of responders; and how much the capability will cost.

2. Extend the architecture products to include SVs to capture existing and future tools and/or requirements for tools.

3. Determine regional or hazard specific S&T requirements. “As-is” and “to-be” architecture products enable the conduct of requirements analysis of people, process and tools and the development of capability roadmaps in support of a capability investment model. This

focused planning provides a means for focusing convergence across an area over time while promoting interoperability and linked/leveraged investment plans.

4. Identify, situate and characterize key interface and decision-making steps in the overall Canadian EM process.

5. Support the development of an executable process model for more in-depth analysis of EM processes, and/or be used in tandem with other studies that apply modeling and simulation.

6. Provide a structure for the definition of capability metrics. Capability metrics can be applied to evaluate the overall performance and effectiveness that specific S&T solutions down at the system or subsystem level, be they people, process or tools. By decomposing capability requirements into measurable elements within the context of a scenario (or scenarios), the analysis can be conducted under specific conditions. A metrics analysis can then be formatted to align with the data presented in the architecture framework, providing consistence in representation of where improvement is required, and to what level capability current exists.

5.3 System Architect® Web Publisher

Within time/resource constraints, the utility of SA's "Web Publisher" was explored with the goal to enhance the HTML output generated. The purpose of this exercise was to facilitate use by EM stakeholders. The information obtained is presented here to assist future decision-making regarding the HTML output.

An estimate of the level of effort that would be required to exploit Web Publisher for the data set generated in this study was completed in collaboration with Telelogic® regarding a module enhancement to the baseline SA product (a Telelogic® demo of web module is available).

There were some attempts to discover if there is any particular portal or module that could be installed on top of the HTML report to query specific info from the report and control access or display properties for specific users. According to Telelogic® customer support staff, there is currently no specific portal or a module that would help us to query specific information from an HTML report (SA output). However, they believe that this kind of requirement could be achieved by a customization process, which would be handled by their Professional Services (PS) team.

Communication with Telelogic® uncovered that there are currently two tools that can aid the enhancement of SA output in HTML format for use with a web browser. The first one facilitates making the HTML report sophisticated and easy to navigate and the second one is a web interface to a SA repository:

7. SA Publisher:

    a. Description: Telelogic® SA Information Web Publisher™ enables companies to quickly and efficiently build, deploy, and maintain content-rich Web sites based upon models and data held in the Telelogic System Architect® repository. SA Information Web Publisher uses an enhanced version of the System Architect reporting engine to produce a series of Web pages containing highly customized analytical data on

repository artefacts. SA Information Web Publisher also connects these pages together in a highly navigable way to build a complete Web site with a user-friendly browser tree for quick navigation. Furthermore, SA Information Web Publisher provides you with pre-built templates that address all aspects of SA's supported modeling notations, including Enterprise Architecture, Business Process Modeling, UML, data modeling, and Department of Defense Architecture Framework (DoDAF). You can tailor these templates or create your own using SA Information Web Publisher's graphical user interface.

b. Price: USD$15,450; first year annual maintenance is USD$3,090

8. SA XT:

a. Description: Telelogic SYSTEM ARCHITECT®/XT™ is a Web-based enterprise architecture and business process analysis solution that provides real-time, role-based data access and decision support to the extended enterprise. Because visibility into an Enterprise Architecture (EA) is the foundation for actionable decision-making across the organization, SYSTEM ARCHITECT®/XT provides users with direct, Web-based, real-time access to the Enterprise Architecture. SYSTEM ARCHITECT®/XT also enables users to update the repository via a configurable, easy-to-use interface.

b. Price: Read/write con-current licenses are USD$2,595 each; first year annual maintenance is USD$519.

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Annex A Capability Based Analysis

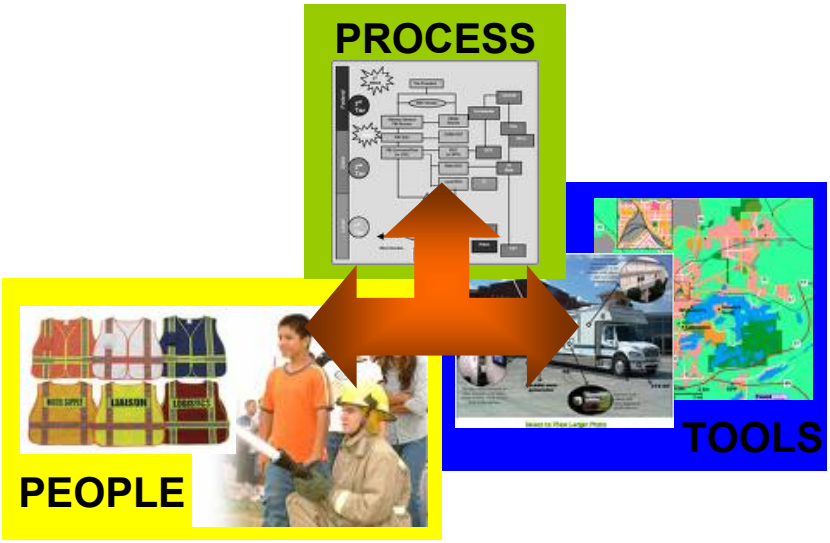
A.1 Capability-Based Planning Methodology

Capability based planning (CBP) (also referred to as capability-based analysis (CBA)) is a process that translates policy in the context of specified risks into capability goals to mitigate those risks; and which then identifies and validates priority capability gaps between those goals and current capabilities and planned improvements. CBP has been adopted, to varying degrees, by western militaries in response to the need for speed in agility in defence planning[8] and the desire to move away from strictly threat-based planning. Since asymmetric threats, faster innovation cycles, and an increase of interdependency have challenged the existing service focused, platform-centric defence culture, CBP has been instituted as a response to address increased uncertainty and continuing volatility in the security environment and as a means to effect defence transformation. CBP embraces functional analysis of operational requirements in response to a broad range of circumstances and challenges.[9] It is intended to be concept led and top-down driven, to encourage holistic system-of-systems thinking, foster innovation, and challenge and supplant existing service focused, platform-centric (stovepipe) culture.

CBP offers a transparent process by linking procurement decisions to strategic goals and policy, emphasising *What do we need to be able to do in the future?* instead of the more reactive *What equipment needs to be replaced now?* CBP enhances the quality of information available to decision-makers and defines strategy in a standardised concept that facilitates multi-agency interoperability. In application, CBP implements a system-of-systems approach to capture the interdependencies of people, processes and tools that exist both as and within complex systems. The capability based analysis methodology applies an "ends – ways – means" paradigm where the desired end state 'effect' is delivered through capability based 'ways' which are composed of people, process and technological 'means'.

[8] The Technical Cooperation Program (TTCP) Joint Systems and Analysis Group Technical Panel 3, *Guide to Capability-Based Planning*, www.dtic.mil/ttcp/JSA-TP-3-CBP-Paper-Final.doc .

[9] CBP has been construed to 1) include requirements definition, options analysis and acquisition/capability generation and 2) describe the front-end goal characterization. Confusion can exist because the two interpretations are often used interchangeably.



The People, Process and Tools Provide the Means to Achieve the Capability

The US Homeland Security Presidential Directive 8: National Preparedness (HSPD-8) calls for an all-hazards National Preparedness Goal (the Goal) that establishes measurable priorities, targets, and a common approach to developing needed capabilities. The Goal sets forth a Capabilities-Based Planning approach to help balance the potential threat and magnitude of terrorist attacks, major disasters, and other emergencies with the resources required to prevent, respond to, and recover from them[10].

A.1.1 Capability Engineering and Management

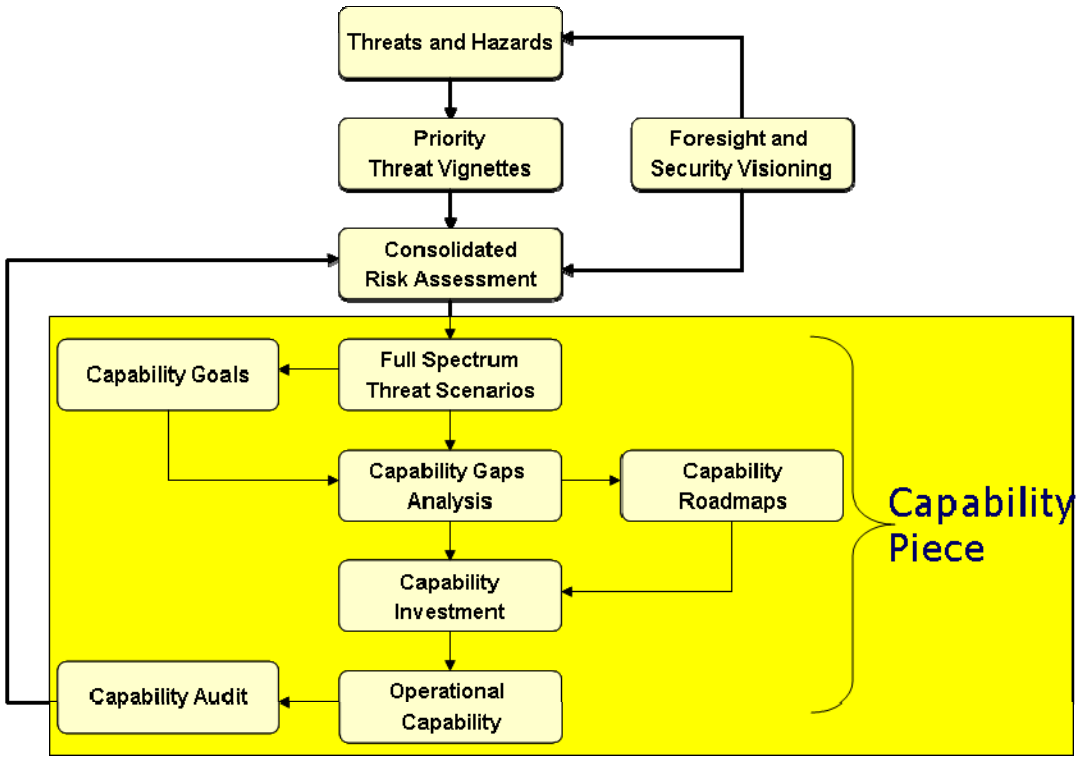
The concepts of CBP are extended through Capability Engineering and Capability Management. Capability Engineering identifies and develops solutions to address priority capability gaps and the plan (capability roadmap) of how a set of solutions, in time, will be translated into viable, coherent and integrated operational capabilities. Capability Management attempts to add order to the abstract world of system acquisition and life cycle management through:

- Capability Employment (i.e. Operations)
- Capability Readiness & Sustainment; and
- Capability Development (i.e. Force Generation)[11].

[10] More information on the DHS CBP can be found at http://www.ojp.usdoj.gov/odp/assessments/hspd8.htm.
[11] Walker, Robert S. *Towards Defence Capability Management: A Discussion Paper*, Defence Research and Development Canada, 12 June 2001.

Success criteria includes addressing the enabling tool and process requirements, the adoption of a system engineering approach to facilitate and discipline integration, an architectural basis and the exploitation of modelling & simulation.

Capability engineering assesses gaps and defines 'capability options' for investment planning through the development of capability roadmaps. Capability roadmaps define the sequence of implementing solutions that consist of people, process and/or tools. They often include multiple integrated 'views', such as a S&T roadmap (short/mid/long-term S&T plan), an HR roadmap (personnel training, recruitment plan), an equipment acquisition plan and/or a technical Standards plan. This focused planning provides a means for focusing convergence across an area over time while promoting interoperability and linked/leveraged investment plans.



Capability Based Investment Model

A.1.2 System-of-Systems

Systems engineering is "a logical sequence of activities and decisions that transforms an operational need into a description of system performance parameters and a preferred system

configuration"[12]. System-of-systems (SoS) engineering has developed more recently as an extension in response to (1) acknowledgement of the increasingly interdependence between discrete systems and the expanding numbers of stakeholders, and (2) the availability of more sophisticated modeling tools and techniques.[13] Whereas a system has clearly defined borders and ordered behaviour, a SoS is characterized by porous boundaries and evolving behaviour. SoS engineering reflects an attempt to capture inter and intra-enterprise dependencies and to model the behaviour of system-of-systems.

The overarching premise is that complex systems in the public security and safety environment can be thought of as mutually dependent but loosely coupled components, each of which has some autonomy. These interdependent parts are viewed as a system-of-systems requiring integration. SoS engineering will provide the means to consider integration within and between systems, and to address design, configuration and integration of existing and new systems.

In the Canadian public safety environment, complex systems (consisting of people, processes and technologies) are often government departments and agencies. SoS can be used to characterise the relationship within and between federal level stakeholders at a high level, as illustrated in Figure 3 below:

[12] MILSTD 499A, Engineering Management
[13] The US DoD defines a System of Systems as a set or arrangement of systems that results when independent and useful systems are integrated into a larger system that delivers unique capabilities. Department of Defense. DoD Architecture Framework Deskbook, February 2004, http://www.defenselink.mil/nii/doc/DoDAF_v1_Volume_I.pdf

A.1.3 Architecture Framework

An architecture can be simply viewed as a set of blueprints which model or represent a wide variety of relationships inherent to the overall capability being managed. The IEEE defines architecture as "the structure of components, their interrelationships, and the principles and guidelines governing their design and evolution over time"[14]. Architectures offer distinct advantages in structuring information and managing complexity, incremental development and implementation. They impose discipline and ensure use of a common language across diverse stakeholders.

Architecture frameworks enable the analyst to capture the people, processes and technologies that exist (the "as is") or need to exist (the "to be") within a capability. Architecture frameworks are also referred to as Enterprise Architectures in industry, and have been successfully applied to assist companies to optimise interdependencies and relationships between business operations, clarify their underlying infrastructure and support applications across large distributed organisations[15]. The architecture framework outlines "what" the overall structured approach is for assisting interoperability and "how" the components will operate.

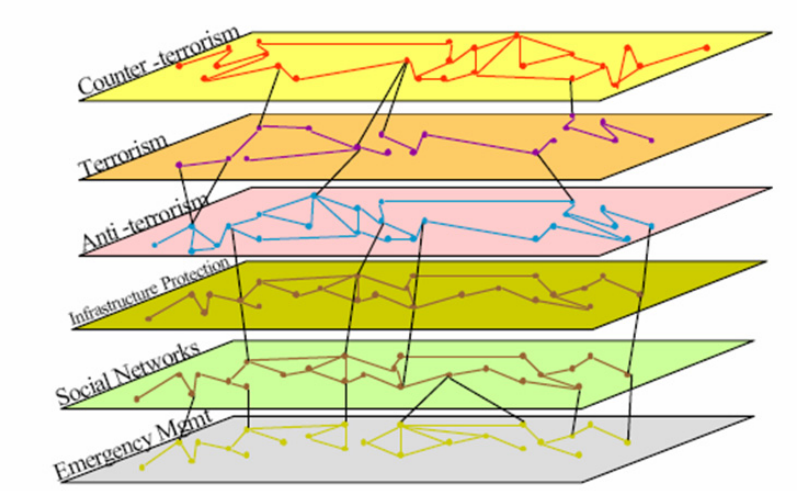
As illustrated by the following list of uses of architecture, when defined, implemented and maintained the application of architecture will help decision makers to make solid decisions based on quality information[16]:

- Business alignment. Align solutions with business strategy and operational requirements.
- Decision support. Improve analysis for decision making to reduce risk.
- Business Continuity Planning. Improve visibility of causes and effects and structure solutions.
- Information management. Improve quality, availability, and communication of information.
- Interoperability. Improve information sharing and re-use between systems and organizations.
- Economies of scale. Identify opportunities for shared services and information.
- Managed complexity. Provide simplified views that help communicate the complexity of business processes and systems.

[14] Institute of Electrical and Electronics Engineers, Inc. (IEEE) Standard 610.12
[15] General Accounting Office, USA. GAO-04-798T, "The Federal Enterprise Architecture and Agencies' Enterprise Architectures are Still Maturing," May 19, 2004.
[16] Department of National Defence and Canadian Forces Architecture Framework (DNDAF), Department of National Defence Assistant Deputy Minister (Information Management), Director Enterprise Architecture. Version 1, 29 June 2007.

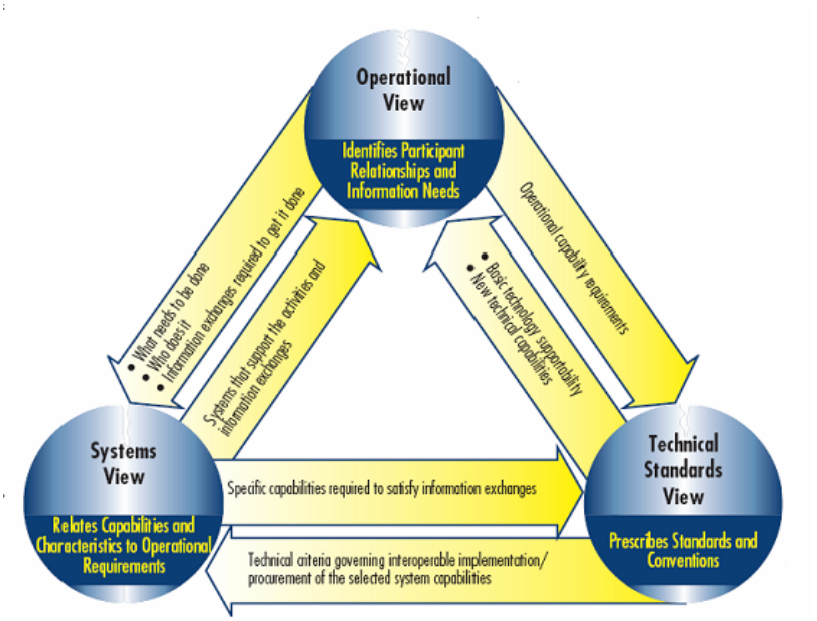
- Planning, acquisition and management support. Provide tools to assess cost, benefits, and impacts to support option analysis and risk management.
- Change management and transformation. Identify dependencies and manage migration from as-is to target states. Track progress on transformation plans.
- Standardized vocabulary. Enable analysis with a reference architecture that allows "apple to apple" comparisons.
- Compliance. Ensure compliance legal, regulatory and standards compliance.
- Integration. Provides the mechanism for integrating perspectives of the enterprise through a common architecture repository.

The application of architectures is useful to characterise diverse elements in multi-faceted problem spaces such as pubic safety. The tool is advantageous to the analyst as it enables the capture of inter-relationships between different agencies, domains, scenarios or environments, presenting the data in one framework.



Inter and Intra Relationship Capture Across Multiple Domains

Architecture frameworks define a series of products in textual, tabular and graphic formats. These structured architecture products are the outputs of the architecture framework. Standardising the representation of data elements supports analysis of multiple diverse organisations in different views. These views provide different perspectives of information, comparable to building a house: there is a designer perspective (view), a builder perspective (view) and an owner perspective (view). Possible architecture views include: operational views, systems views, technical views, strategic views, human views, etc. The views are defined not to stand alone but to have linkages. Thus, data elements captured in multiple views enable the analysis of interdependencies and interactions between people, processes and technologies within a system and across systems. The following figure illustrates the views of the US Public Safety Architecture Framework (PSAF) as an example of views and their linkages that may be contained in an architecture framework:



Department of Defense Architecture Framework Views (DoDAF)

The analyst can apply architecture frameworks at various levels of fidelity. This facilitates focusing in on certain lower level aspects without loosing traceability to the larger capability goal. Standardising the way information is presented provides for accurate comparison of organisations, determining if two or more systems are interoperable and for the identification of interfaces. Architecture frameworks are a tool – they provide information and insight to a problem space, such as gap identification, but they do not provide solutions. They promote understanding of business operations and processes across organisational boundaries, including jurisdictional and first responder boundaries, and foster multi-agency integration and the adoption of common standards.

Since their inception, architecture frameworks have been and continue to evolve, however, most trace their roots to the Zachman Framework[17]. International defence organisations have promoted the use of architecture frameworks of which the US Department of Defense Architecture Framework (DoDAF) is the most common. The DoDAF has provided a baseline for others including the UK Ministry of Defence Architecture Framework (MoDAF) and the Canadian Department of National Defence Architecture Framework (DNDAF). DoDAF is also the foundation for the US DHS Public Safety Architecture Framework (PSAF) methodology devised to assist the DHS to plan and develop the migration of existing discrete communications systems to interoperable systems. A summary of the DoDAF view is included in Annex A.

[17] Zachman, J.A. A framework for information systems architecture, IBM Systems Journal, Vol. 26 No. 3, 1987

A.1.4 PSTP Architecture Framework

PSTP applies various architecture frameworks, leveraging the best in each in order to derive a methodology to most efficiently assist in assessing the S&T needs of the Canadian public safety and security community. The goal is to be familiar with a series of architecture views and to enable the S&T community to select those appropriate for their project needs and goals. The use of common architecture will facilitate cross project comparisons as well as horizontal and vertical analysis of the systems under study in individual projects. Using standard views for representing data elements will also benefit long term capability planning as enhancements to people, processes and technologies can be phased in over time without having to re-invest time and money to scope out the landscape from point zero. Current views for consideration include: Common Views, Operational Views, System Views, Technical Views, Acquisition Views, Strategic Views, Security Views and Human Views (Annex A provides a summary of the DoDAF views which encompass All Views (or Common Views), Operational Views, System Views and Technical Views).

The full series of architecture views is not intended to be a prescription for all projects – each project will have its own unique needs and goals. From these needs and goals, the appropriate views can be selected from the architecture framework. However, because the data elements will be represented in a standardised format, future projects could leverage the work and build upon what has already been done.

A.1.5 Scenario Driven

System analysis often requires a scenario to give a particular context to the environment under study. People, process and technology may behave differently under different circumstances. When defining capabilities, a representative set of illustrative scenarios can be used to provide context and to facilitate assessment. This often requires determining the appropriate fidelity of the scenario set, developing an agreed decomposition schema and/or one-to-many mapping of tasks to capabilities. The definition of these elements in the context of a scenario assists when assessing cross domain trade-offs in absence of common metrics. Capability gaps can be defined though comparing existing and future operational structures.

A.1.6 User Driven

The Centre helps to engage S&T to identify and develop options for its stakeholders and partners. From the creation of architectural modeling products and scenario definition to the choice of tools and the application of metrics, the capability engineering elements to be included in an analysis are grounded in addressing the needs of the capability goal. The capability engineering approach weighs heavily on user input and strives to be flexible to adapt easily to changes in user requirements while providing constancy in the portrayal of information, a real world challenge of the dynamic world of S&T.

A.1.7 Modelling & Simulation

Modelling and simulation (M&S) provides both a measure of objectivity in reconciling diverse perspectives and a cost effective alternative to prototyping or conducting live exercises. For

example, business process modelling & simulation allows for examination of a system or system-of-systems practices under dynamic conditions. The data elements captured in the architecture accurately reflects the attributes of the people, process and technology of a particular capability in an "as is" and/or "to be" environment. When captured in a synthetic M&S application, multiple analyses can be conducted, providing an opportunity to prioritise acquisition decision making or identify areas of concern, such as capability gaps or challenges to multi-agency interoperability. The tools also permit stakeholders to compare and contrast the effects of one or a combination of many proposed solutions. To this end, the current trend is towards extending the exploitation of architectures to support continuous and constructive simulation[18] using the concept of executable architectures. M&S facilitates the validation and verification of S&T investments, aligning procurement to strategic goals.

A.1.8 Application of Metrics

Quantifiable, measurable success is the responsibility of every government department as per the Results Management Accountability Framework (RMAF) guidelines maintained by the Treasury Board Secretariat (TBS). A capability cannot simply be declared 'better' because it incorporates new equipment or processes: it must be proven. Capability metrics provide a way to evaluate the overall performance and effectiveness that specific solutions down at the system or subsystem level may have had, be they people, process or technologies. In order to ensure that S&T solutions will improve a stakeholders' existing capability, success will be measured by applying metrics to the improvement in overall capability. For example, improvement may be measured in terms of a reduction of human resources needed to achieve a desired capability, or in terms of the scope of a technology to expand detection capabilities, or in performance changes to enhance persistence, range, reach or agility of the capability.

Metrics provide a way to evaluate the effectiveness of a change to a capability, be it people, process or technology. By decomposing capability requirements into measurable elements within the context of a scenario, the outcome of the change can be analysed under specific conditions. A metrics analysis can be formatted to align with the data presented in the architecture framework, providing consistence in representation of where improvement is required, and to what level capability current exists. A graphical output of metric results eases understanding and dissemination, clearly showing improvements in a "to be" environment over its "as is" predecessor. Equally useful is a statement of priority, giving greater weight to improvement in a specific capability area, such as cost, detection range or persistence for example, as per the user's requirements. The US DHS publishes evaluation guides that can be used to direct the development of capability goals, or the application of other frameworks, such as PARRI may be used. As a demonstration of the elements that may be contained in a metrics framework, PARRI consists of the following:

P ersistence of sustained effect

A gility (speed of application and redirection)

R ange of effects (versatility)

[18] Vitech. CORE: A Model-Based Approach to Systems Engineering and Architecting, presentation to CORE Users' Workshop Ottawa 6 June 2006.

R each of effects

I nformation (precision, timeliness, quality, etc).

The application of metrics entails the decomposition of capability requirements into measurable elements within the context of defined scenarios to ensure the secure flow of goods and people across the US-Canada border. A common metrics set provides a key integration tool. The application of metrics will demonstrate improvements in a “to be” environment over its “as is” predecessor. The definition of the metrics framework is linked to user requirements to support system or system-of-system level diagnostic analysis. Metrics will be applied to a defined verification exercise that may include a virtual modelling and simulation environment or live simulation (such as a field trial) conducted to evaluate proposed S&T solutions.

Capability Metrics frameworks are often based on the concept of value focused thinking (VFT). In VFT, all possible alternatives are mapped to those that completely address fundamental objectives contained in the value hierarchy. In a fashion similar to objectives of capability-based planning, VFT focuses on “value” obtained rather than comparing the merits of alternatives against each other (i.e., it’s not the tool set but the capability the tool set possesses). The development of metrics is conducted from a “top-down” approach, through the identification of the problem space, the associated capability requirements as identified through a value hierarchy, and the development of measures that can be applied to evaluate changes in effect

Annex B Department of Defense Architecture Framework (DoDAF) Views

The following has been extracted from the US Department of Defense DoDAF Deskbook, February 2004 (http://www.defenselink.mil/nii/doc/DoDAF_v1_Volume_I.pdf):

Applicable View	Framework Product	Framework Product Name	General Description
All Views	AV-1	Overview and Summary Information	Scope, purpose, intended users, environment depicted, analytical findings
All Views	AV-2	Integrated Dictionary	Architecture data repository with definitions of all terms used in all products
Operational	OV-1	High-Level Operational Concept Graphic	High-level graphical/textual description of operational concept
Operational	OV-2	Operational Node Connectivity Description	Operational nodes, connectivity, and information exchange needlines between nodes
Operational	OV-3	Operational Information Exchange Matrix	Information exchanged between nodes and the relevant attributes of that exchange
Operational	OV-4	Organisational Relationships Chart	Organisational, role, or other relationships among organisations
Operational	OV-5	Operational Activity Model	Capabilities, operational activities, relationships among activities, inputs, and outputs; overlays can show cost, performing nodes, or other pertinent information
Operational	OV-6a	Operational Rules Model	One of three products used to describe operational activity—identifies business rules that constrain operation
Operational	OV-6b	Operational State Transition Description	One of three products used to describe operational activity—identifies business process responses to events
Operational	OV-6c	Operational Event-Trace Description	One of three products used to describe operational activity—traces actions in a scenario or sequence of events
Operational	OV-7	Logical Data Model	Documentation of the system data requirements and structural business process rules of the Operational View
Systems	SV-1	Systems Interface Description	Identification of systems nodes, systems, and system items and their interconnections, within and between nodes
Systems	SV-2	Systems Communications Description	Systems nodes, systems, and system items, and their related communications lay-downs
Systems	SV-3	Systems-Systems Matrix	Relationships among systems in a given architecture; can be designed to show relationships of interest, e.g., system-type interfaces, planned vs. existing interfaces, etc.
Systems	SV-4	Systems Functionality Description	Functions performed by systems and the system data flows among system functions
Systems	SV-5	Operational Activity to Systems Function Traceability Matrix	Mapping of systems back to capabilities or of system functions back to operational activities
Systems	SV-6	Systems Data Exchange Matrix	Provides details of system data elements being exchanged between systems and the attributes of that exchange
Systems	SV-7	Systems Performance Parameters Matrix	Performance characteristics of Systems View elements for the appropriate time frame(s)
Systems	SV-8	Systems Evolution Description	Planned incremental steps toward migrating a suite of systems to a more efficient suite, or toward evolving a current system to a future implementation
Systems	SV-9	Systems Technology Forecast	Emerging technologies and software/hardware products that are expected to be available in a given set of time frames and that will affect future development of the architecture

Applicable View	Framework Product	Framework Product Name	General Description
Systems	SV-10a	Systems Rules Model	One of three products used to describe system functionality—identifies constraints that are imposed on systems functionality due to some aspect of systems design or implementation
Systems	SV-10b	Systems State Transition Description	One of three products used to describe system functionality—identifies responses of a system to events
Systems	SV-10c	Systems Event-Trace Description	One of three products used to describe system functionality—identifies system-specific refinements of critical sequences of events described in the Operational View
Systems	SV-11	Physical Schema	Physical implementation of the Logical Data Model entities, e.g., message formats, file structures, physical schema
Technical	TV-1	Technical Standards Profile	Listing of standards that apply to Systems View elements in a given architecture
Technical	TV-2	Technical Standards Forecast	Description of emerging standards and potential impact on current Systems View elements, within a set of time frames

Figure 1. *Description of DoDAF Views*

Annex C OV-2

This annex contains the PSTP Canadian EM OV-2 product as described in section 3.1.2 of this document.

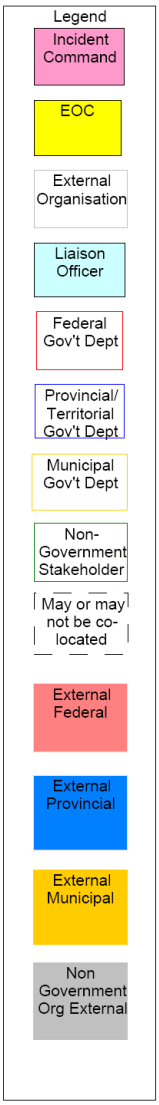
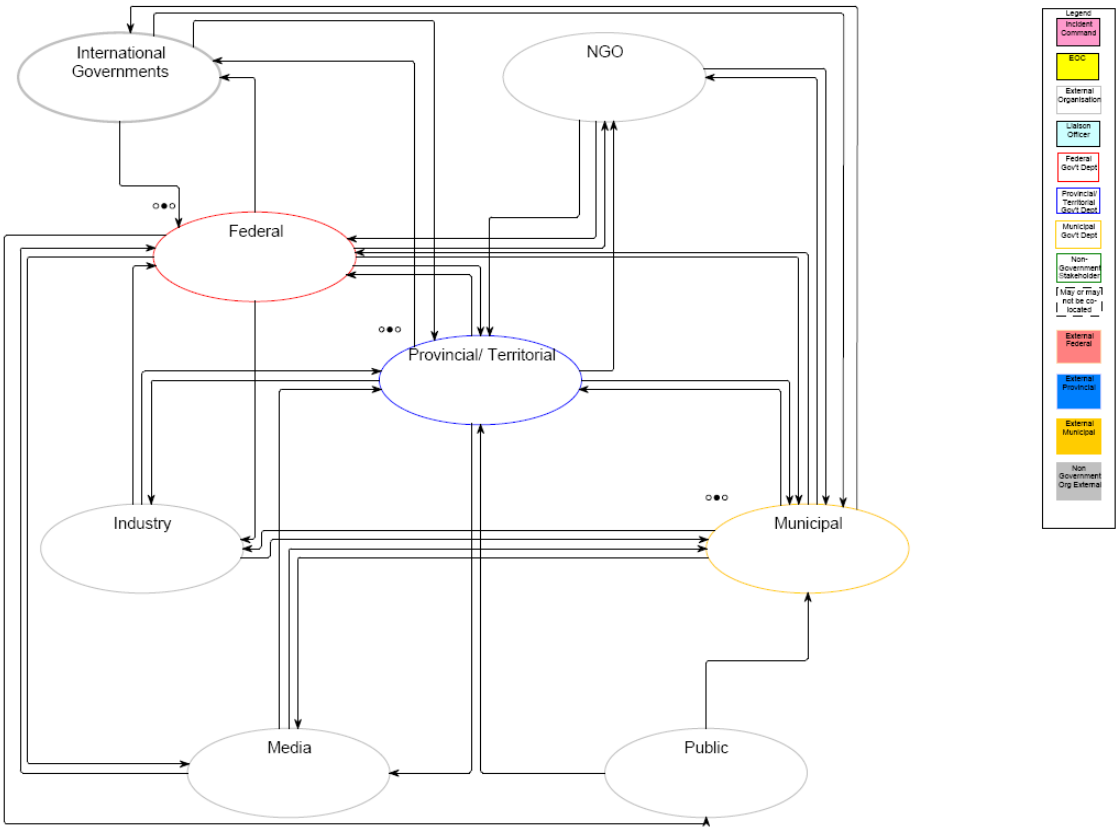
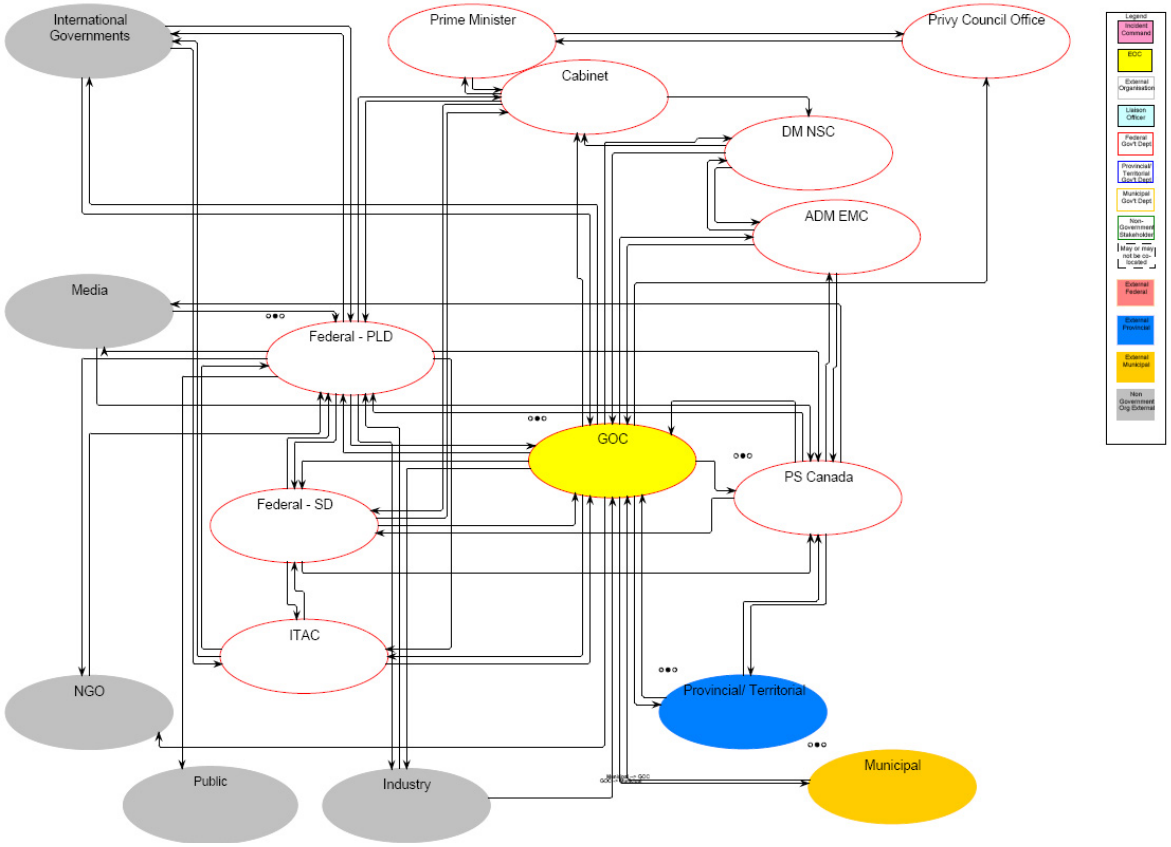


Figure 22: PSTP Canadian EM Generic Response OV-2 Legend

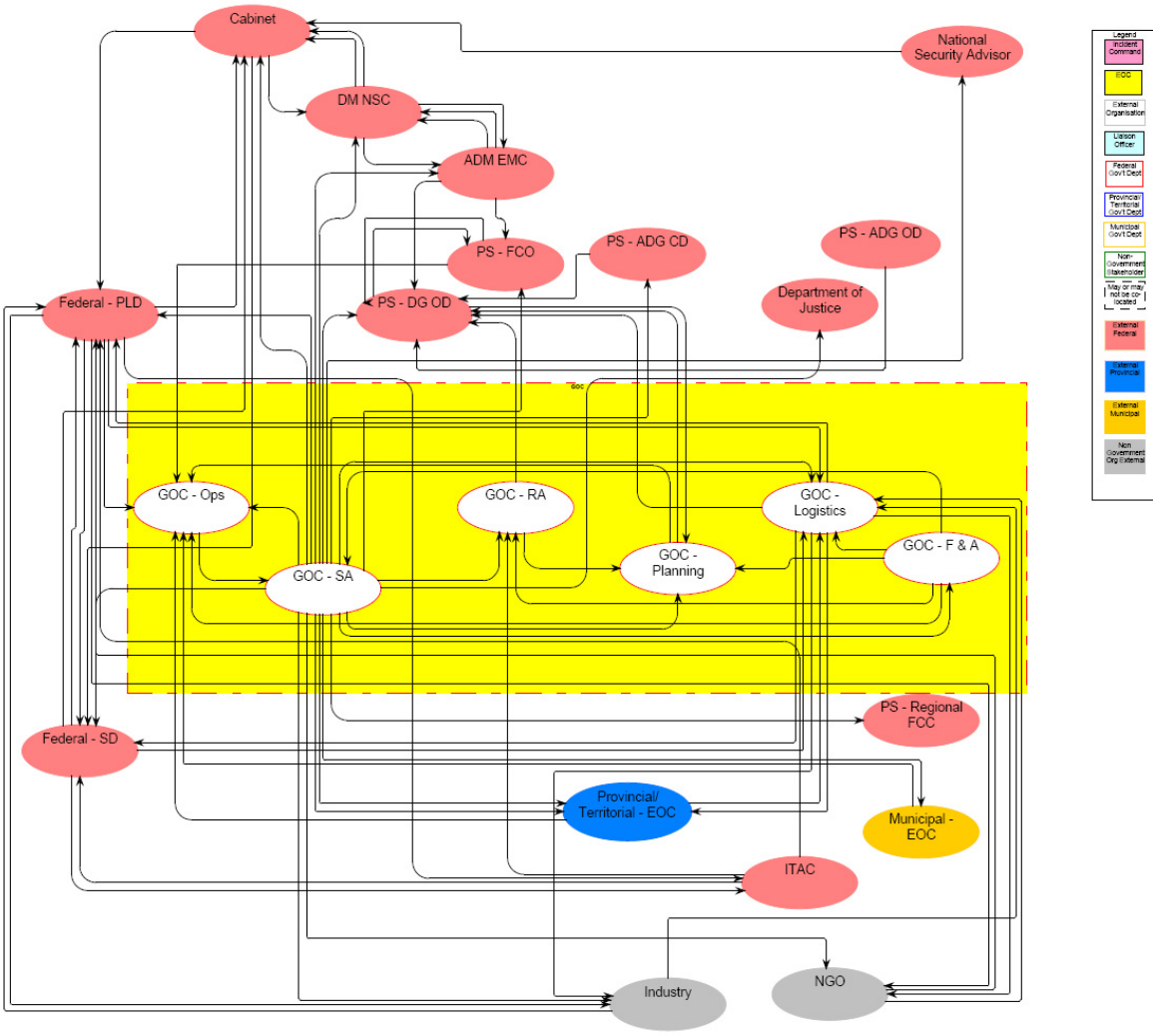
Canadian EM - OV-2 - All Generic Top Level [OV-02 Op. Node Connectivity]



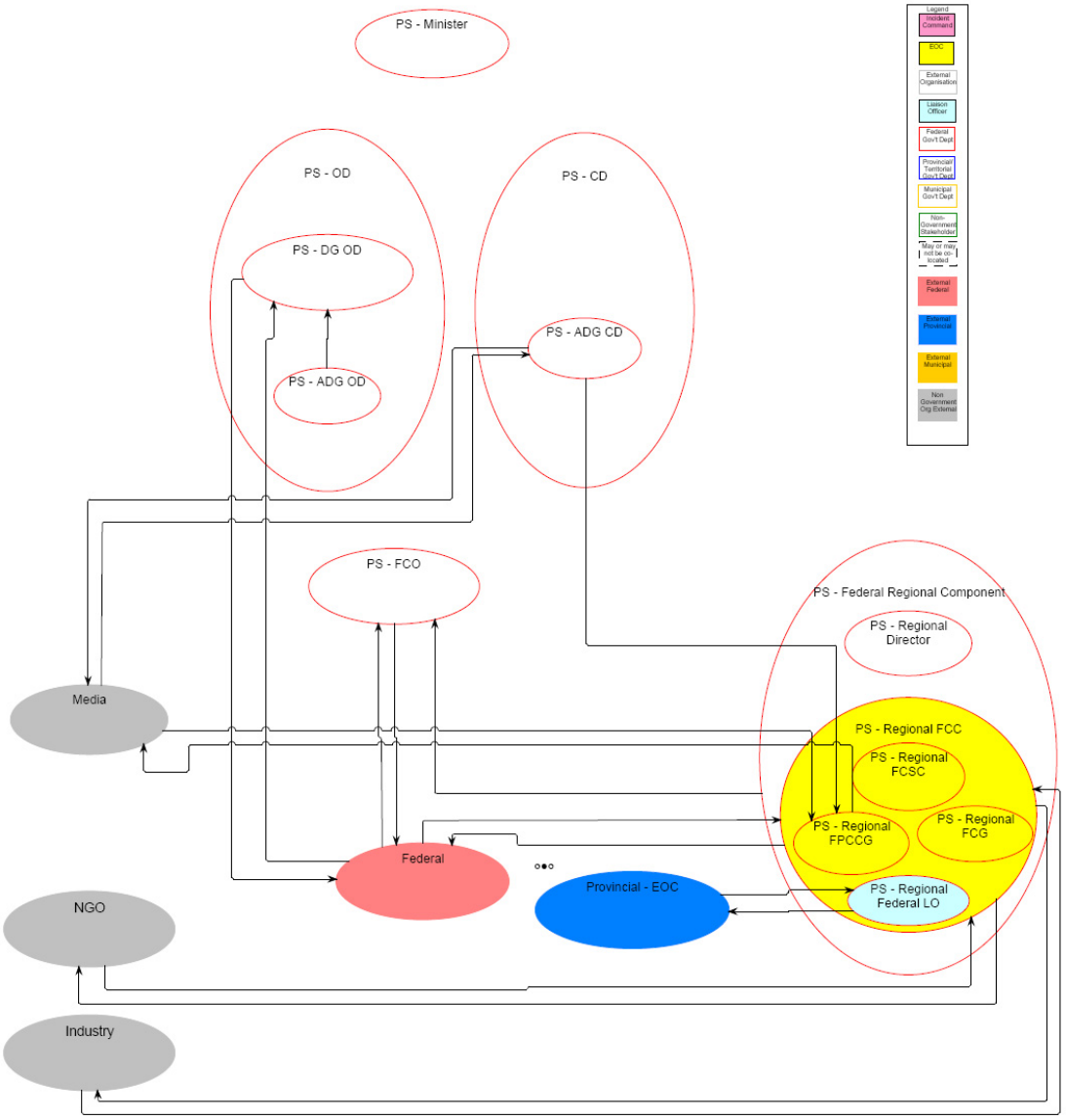
Canadian EM - OV-2 - Federal Generic Top Level [OV-02 Op. Node Connectivity]



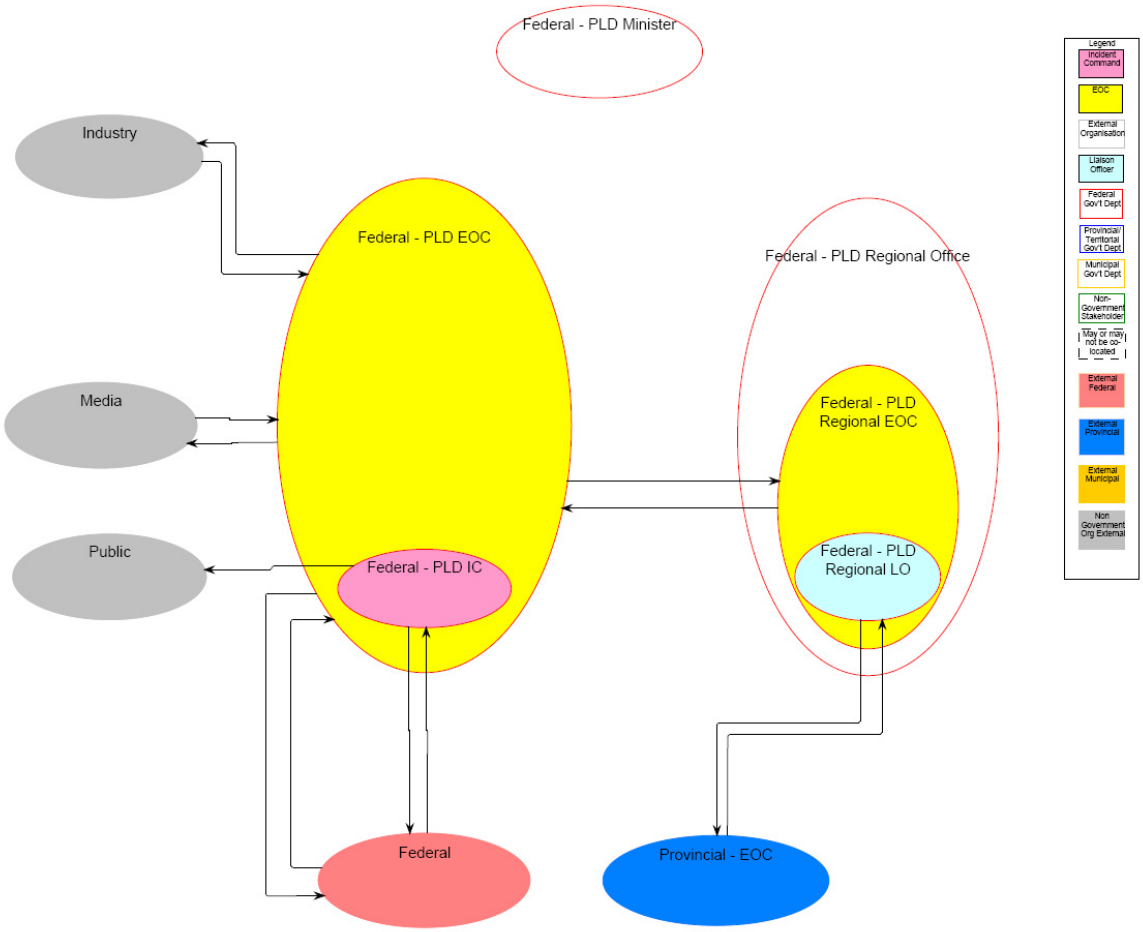
Canadian EM - OV-2 - Federal GOC Generic [OV-02 Op. Nod Connectivity]



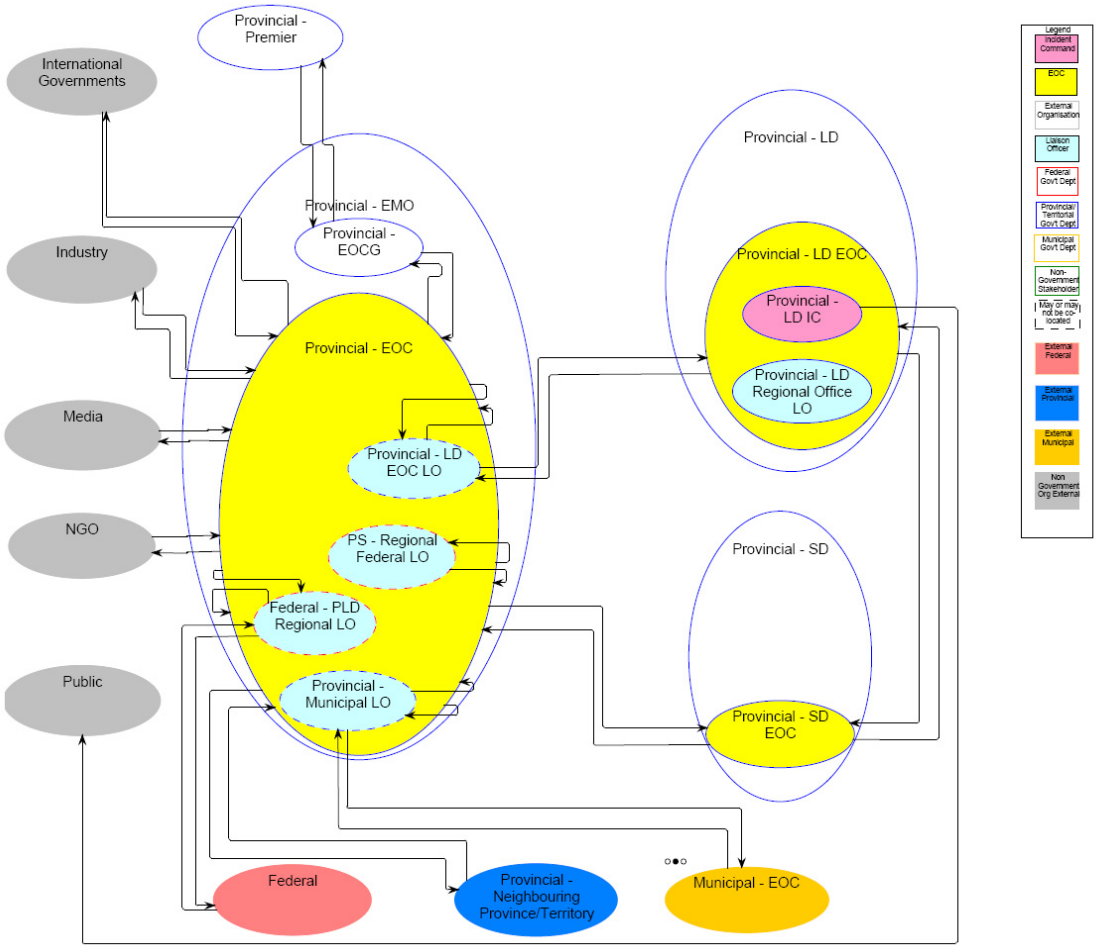
Canadian EM - OV-2 - Federal PS Canada Generic [OV-02 Op. Node Connectivity]



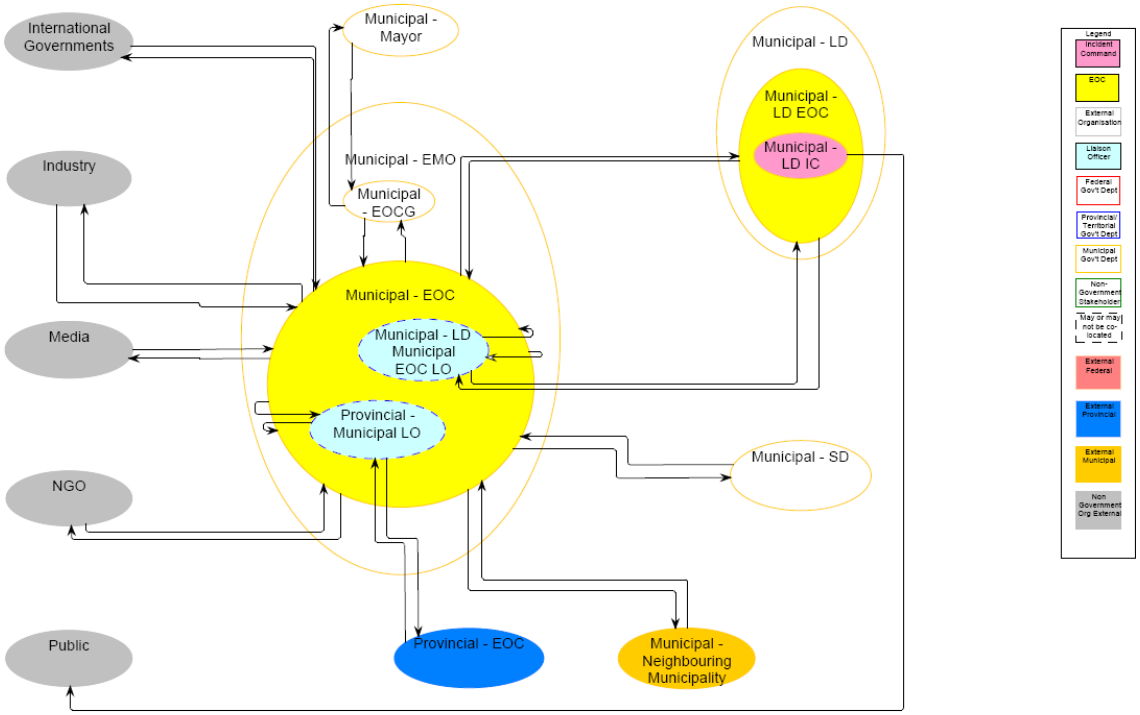
Canadian EM - OV-2 - Federal Primary Lead Department Generic [OV-02 Op. Node Connectivity]



Canadian EM - OV-2 - Provincial Generic Top Level [OV-02 Op. Node Connectivity]



Canadian EM - OV-2 - Municipal Generic Top Level [OV-02 Op. Node Connectivity]



Annex D OV-3

This Annex contains the PSTP Canadian EM OV-3 product as described in section 3.1.3 of this document.

Need Line	Information Exchange	Source Node	Source Activity	Destination Node	Destination Activity
ADM EMC --> DG OD	ADM EMC guidance for OGD through DG OD	ADM EMC	ADM EMC provides EM guidance Provide direction to officials in GOC through DG OD	PS - DG OD	DG OD Manage GOC Provide Planning Guidance to GOC - Planning
ADM EMC --> PS Canada	ADM EMC guidance to FCO	ADM EMC	ADM EMC provides EM guidance Support FCO	PS Canada	
ADM EMC --> FCO	ADM EMC guidance to FCO	ADM EMC	ADM EMC provides EM guidance Support FCO	PS - FCO	FCO coordinates federal emergency response
ADM EMC --> GOC	Guidance	ADM EMC		GOC	
ADM EMC --> DM NSC	SA and COA	ADM EMC		DM NSC	
Cabinet --> DM NSC	Cabinet - direction to senior officials	Cabinet	Cabinet provides direction to senior officals Cabinet oversees EM	DM NSC	DM NSC Provides EM Guidlines
Cabinet --> PM	Cabinet - direction to senior officials	Cabinet	Cabinet provides direction to senior officals Cabinet oversees EM	Prime Minister	
Cabinet --> Federal - PLD	Cabinet - direction to senior officials	Cabinet	Cabinet provides direction to senior officals Cabinet oversees EM	Federal - PLD	Federal PLD Lead EM
Cabinet --> Federal - SD	Cabinet - direction to senior officials	Cabinet	Cabinet provides direction to senior officals Cabinet oversees EM	Federal - SD	Federal SD Supports EM
DM NSC --> ADM EMC	DM NSC guidance to ADM EMC	DM NSC	DM NSC Provides EM Guidlines	ADM EMC	ADM EMC provides EM guidance ADM EMC receives GOC SA Products
DM NSA --> ADM EMC	DM NSC guidance to ADM EMC	DM NSC	DM NSC Provides EM Guidlines	ADM EMC	ADM EMC provides EM guidance ADM EMC receives GOC SA Products
Federal-->Federal-PLD EOC	Request for information	Federal		Federal - PLD EOC	
	Resource allocation	Federal		Federal - PLD EOC	
	Resource availability	Federal		Federal - PLD EOC	
	Situation Report	Federal		Federal - PLD EOC	
Federal-PLD-->Public	Emergency Site Response	Federal - PLD		Public	
Federal - PLD --> Media	Media Lines	Federal - PLD		Media	
Federal - PLD --> Cabinet	Primary Dept RFA	Federal - PLD	Federal PLD Lead EM	Cabinet	
Federal - PLD --> GOC	Request for assistance	Federal - PLD		GOC	
	Request for assistance	Federal - PLD		PS Canada	
Federal - PLD --> Industry	Request for assistance	Federal - PLD		Industry	
	Request for assistance	Federal - PLD		NGO	
	Request for information	Federal - PLD		ITAC	
	Request for information	Federal - PLD		Industry	
	Resource availability	Federal - PLD		Industry	
Federal-PLD-->GOC-Logistics	Resource availability	Federal - PLD		GOC - Logistics	
Federal PLD --> GOC - Ops	SiteRep (Federal PLD)	Federal - PLD		GOC - Ops	
Federal - PLD --> PS Canada	Situation Report	Federal - PLD		PS Canada	
Federal - PLD --> ITAC	Situation Report	Federal - PLD		ITAC	
	Situation Report	Federal - PLD		Industry	
Federal - PLD --> NGO	Situation Report	Federal - PLD		NGO	
	Situation Report	Federal - PLD		Cabinet	
Federal - PLD --> International Governments	Situational Awareness	Federal - PLD		International Governments	
Federal - PLD EOC --> Media	Media Lines	Federal - PLD EOC		Media	
Federal-PLD EOC-->Federal	Request for assistance	Federal - PLD EOC		Federal	
Federal - PLD --> Industry	Request for assistance	Federal - PLD EOC		Industry	
	Request for information	Federal - PLD EOC		Federal - PLD Regional EOC	
	Request for information	Federal - PLD EOC		Federal	
	Request for information	Federal - PLD EOC		Industry	
	Resource allocation	Federal - PLD EOC		Federal - PLD Regional EOC	
Federal-PLD EOC-->Federal-PLD Regional EOC	Situation Report	Federal - PLD EOC		Federal - PLD Regional EOC	
	Situation Report	Federal - PLD EOC		Federal	
	Situation Report	Federal - PLD EOC		Industry	
Federal-PLD IC-->Public	Emergency Site Response	Federal - PLD IC		Public	
	Request for assistance	Federal - PLD Regional EOC		Federal - PLD EOC	
	Request for information	Federal - PLD Regional EOC		Federal - PLD EOC	
	Resource availability	Federal - PLD Regional EOC		Federal - PLD EOC	
Federal-PLD Regional EOC-->Federal-PLD EOC	Situation Report	Federal - PLD Regional EOC		Federal - PLD EOC	
	Request for assistance	Federal - PLD Regional LO		Provincial - EOC	
Federal-PLD Regional LO-->P/T- EOC	Request for information	Federal - PLD Regional LO		Provincial - EOC	
Federal-PLD Regional LO-->P/T EOC	Resource availability	Federal - PLD Regional LO		Provincial - EOC	

Need Line	Information Exchange	Source Node	Source Activity	Destination Node	Destination Activity
	Situation Report	Federal - PLD Regional LO		Provincial - EOC	
	Situation Report	Federal - PLD Regional LO		Provincial - EOC	
Federal - SD --> Cabinet	Federal SD Request for Assistance	Federal - SD		Cabinet	
Federal - SD --> Federal - PLD	Resource allocation	Federal - SD		Federal - PLD	
Federal - SD --> GOC	Resource availability	Federal - SD		GOC	
Federal - SD --> PS Canada	Resource availability	Federal - SD		PS Canada	
Federal-SD-->GOC-Logistics	Resource availability	Federal - SD		GOC - Logistics	
Federal - SD --> ITAC	Situation Report	Federal - SD		ITAC	
	Decision Brief	GOC	GOC facilitate EM	PS Canada	
GOC --> Federal - SD	Request for assistance	GOC		Federal - SD	
GOC --> Industry	Request for assistance	GOC		Industry	
GOC --> NGO	Request for assistance	GOC		NGO	
	Request for information	GOC		Industry	
	Resource availability	GOC		Industry	
GOC --> ADM EMC	Sit Rep (GOC SA)	GOC	GOC facilitate EM	ADM EMC	ADM EMC receives GOC SA Products ADM EMC provides EM guidance
GOC --> PS Canada	Situation Report	GOC		PS Canada	
GOC --> PCO	Situation Report	GOC		Privy Council Office	
	Situation Report	GOC		Industry	
	Situation Report	GOC		NGO	
GOC-F&A --> GOC-Operations	Notifications (GOC SA)	GOC - F & A		GOC - Ops	
	Sit Rep (GOC SA)	GOC - F & A		GOC - Ops	GOC Ops receive, prioritise, distribute and log all classified & unclass docs GOC Ops Facilitate Operations
GOC-Logistics-->P/T-EOC	Resource mobilisation	GOC - Logistics		Provincial/ Territorial - EOC	
GOC-Logistics-->Federal-PLD	Resource mobilisation	GOC - Logistics		Federal - PLD	
GOC-Logistics-->Federal-SD	Resource mobilisation	GOC - Logistics		Federal - SD	
GOC-Logistics-->Industry	Resource mobilisation	GOC - Logistics		Industry	
GOC-Logistics-->NGO	Resource mobilisation	GOC - Logistics		NGO	
GOC-Ops --> GOC-SA	Validated info for SA (Ops - SA)	GOC - Ops	GOC Ops Facilitate Operations GOC OPs provides 24/7 monitoring, validating and reporting	GOC - SA	GOC SA Facilitate SA GOC SA review, analyse and synthesize info from multiple sources
	Action Plan Task Matrix	GOC - Planning	Develop Action Plan Task Matrix with dept reps GOC Planning Facilitates Planning	PS - DG OD	DG OD Manage GOC Provide Planning Guidance to GOC - Planning
	Advance Plan	GOC - Planning		PS - DG OD	
	Contingency Plan	GOC - Planning	GOC Planning Facilitates Planning Develop objectives, COA for Contigency Plan	PS - DG OD	
GOC-Planning --> GOC-Operations	Incident Action Plan	GOC - Planning		GOC - Ops	
GOC-Planning --> PS-DG OD	Incident Action Plan	GOC - Planning		PS - DG OD	
GOC-RA --> GOC-Planning	Risk Assessment Report	GOC - RA	Provide Risk Assessment Report to DG OD for PS Canada GOC RA Facilitates RA	GOC - Planning	GOC Planning Facilitates Planning Develop objectives, COA for Action Plan
GOC-RA --> PS-DG OD	Risk Assessment Report	GOC - RA	Provide Risk Assessment Report to DG OD for PS Canada GOC RA Facilitates RA	PS - DG OD	DG OD receives RAR - request SA or provide for planning DG OD Manage GOC
GOC-SA --> ADM EMC	Decision Brief	GOC - SA	Communicate information to decision-makers through SA product-Decision Brief GOC SA Facilitate SA	ADM EMC	ADM EMC receives GOC SA Products ADM EMC provides EM guidance
GOC-SA --> Federal SD	Decision Brief	GOC - SA	Communicate information to decision-makers through SA product-Decision Brief GOC SA Facilitate SA	Federal - SD	Federal SD Supports EM
	Decision Brief	GOC - SA	Communicate information to decision-makers through SA product-Decision Brief GOC SA Facilitate SA	PS - Regional FCC	FCC receives Decision Brief from GOC SA FCC Coordinates EM
GOC-SA --> DM NSC	Decision Brief	GOC - SA	Communicate information to decision-makers through SA product-Decision Brief GOC SA Facilitate SA	DM NSC	
GOC-SA --> DOJ	Decision Brief	GOC - SA	Communicate information to decision-makers through SA product-Decision Brief GOC SA Facilitate SA	Department of Justice	DOJ Provides legal guidance
GOC-SA --> PS-DG OD	Decision Brief	GOC - SA	Communicate information to decision-makers through SA product-Decision Brief GOC SA Facilitate SA	PS - DG OD	Provide Planning Guidance to GOC - Planning DG OD Manage GOC

Need Line	Information Exchange	Source Node	Source Activity	Destination Node	Destination Activity
	Notifications (GOC SA)	GOC - SA		GOC - Ops	
	Notifications (GOC SA)	GOC - SA		GOC - RA	
	Notifications (GOC SA)	GOC - SA		GOC - Logistics	
	Notifications (GOC SA)	GOC - SA		PS - DG OD	
GOC-SA --> GOC-Ops	Sit Rep (GOC SA)	GOC - SA	GOC SA communicates information to decision-makers through SA product - Sit Rep GOC SA Facilitate SA	GOC - Ops	GOC Ops receive, prioritise, distribute and log all classified & unclass docs GOC Ops Facilitate Operations
GOC-SA -->GOC-Planning	Sit Rep (GOC SA)	GOC - SA	GOC SA communicates information to decision-makers through SA product - Sit Rep GOC SA Facilitate SA	GOC - Planning	GOC Planning Facilitates Planning Develop objectives, COA for Action Plan
GOC-SA --> GOC-F&A	Sit Rep (GOC SA)	GOC - SA	GOC SA communicates information to decision-makers through SA product - Sit Rep GOC SA Facilitate SA	GOC - F & A	GOC F&A Facilitates F&A
GOC-SA --> GOC RA	Sit Rep (GOC SA)	GOC - SA	GOC SA communicates information to decision-makers through SA product - Sit Rep GOC SA Facilitate SA	GOC - RA	GOC RA Facilitates RA Determine risk tolerance Provide Risk Assessment Report to DG OD for PS Canada Provide hazard analysis and probability assessment
GOC-SA --> GOC-Logistics	Sit Rep (GOC SA)	GOC - SA	GOC SA communicates information to decision-makers through SA product - Sit Rep GOC SA Facilitate SA	GOC - Logistics	
	Sit Rep (GOC SA)	GOC - SA	GOC SA communicates information to decision-makers through SA product - Sit Rep GOC SA Facilitate SA	ADM EMC	ADM EMC receives GOC SA Products ADM EMC provides EM guidance
	Sit Rep (GOC SA)	GOC - SA	GOC SA communicates information to decision-makers through SA product - Sit Rep GOC SA Facilitate SA	Federal - SD	Federal SD Supports EM
GOC-SA --> PS- Regional FCC	Sit Rep (GOC SA)	GOC - SA	GOC SA communicates information to decision-makers through SA product - Sit Rep GOC SA Facilitate SA	PS - Regional FCC	FCC receives Sit Rep from GOC SA FCC Coordinates EM
	Sit Rep (GOC SA)	GOC - SA	GOC SA communicates information to decision-makers through SA product - Sit Rep GOC SA Facilitate SA	Department of Justice	DOJ Provides legal guidance
GOC-SA --> Cabinet	Sit Rep (GOC SA)	GOC - SA	GOC SA communicates information to decision-makers through SA product - Sit Rep GOC SA Facilitate SA	Cabinet	Cabinet oversees EM
	Sit Rep (GOC SA)	GOC - SA	GOC SA communicates information to decision-makers through SA product - Sit Rep GOC SA Facilitate SA	PS - DG OD	DG OD Manage GOC Provide Planning Guidance to GOC - Planning
GOC-SA --> NSA	Sit Rep (GOC SA)	GOC - SA	GOC SA communicates information to decision-makers through SA product - Sit Rep GOC SA Facilitate SA	National Security Advisor	Provide information, advice and recommendations to the PM NSA Provides EM Guidlines
GOC-SA -> Federal-PLD	Sit Rep (GOC SA)	GOC - SA	GOC SA communicates information to decision-makers through SA product - Sit Rep GOC SA Facilitate SA	Federal - PLD	Federal PLD Lead EM
GOC-SA-->Municipal EOC	Sit Rep (GOC SA)	GOC - SA	GOC SA communicates information to decision-makers through SA product - Sit Rep GOC SA Facilitate SA	Municipal - EOC	
GOC-SA-->PS-ADG CD	Sit Rep (GOC SA)	GOC - SA	GOC SA communicates information to decision-makers through SA product - Sit Rep GOC SA Facilitate SA	PS - ADG CD	
GOC-SA --> Provincial - EOC	Sit Rep (GOC SA)	GOC - SA	GOC SA communicates information to decision-makers through SA product - Sit Rep GOC SA Facilitate SA	Provincial/ Territorial - EOC	
GOC-SA-->PS-FCO	Sit Rep (GOC SA)	GOC - SA	GOC SA communicates information to decision-makers through SA product - Sit Rep GOC SA Facilitate SA	PS - FCO	FCO coordinates federal emergency response
	Situation Report	GOC - SA		DM NSC	
GOC-SA --> P/T EOC	Situation Report	GOC - SA		Provincial/ Territorial - EOC	
GOC-SA -->NGO	Situation Report	GOC - SA		NGO	
GOC-SA --> Industry	Situation Report	GOC - SA		Industry	
Industry --> Municipal	Request for assistance	Industry		Municipal	
Industry --> Provincial/Territorial interface	Request for assistance	Industry		Provincial/ Territorial	Conduct Provincial/ Territorial EM response
Industry --> Federal - PLD	Request for assistance	Industry		Federal - PLD	
	Request for assistance	Industry		GOC	

Need Line	Information Exchange	Source Node	Source Activity	Destination Node	Destination Activity
	Request for information	Industry		Municipal	
Industry-->Federal-PLD EOC	Request for information	Industry		Federal - PLD EOC	
Industry-->PS-Regional FCC	Request for information	Industry		PS - Regional FCC	
	Request for information	Industry		Municipal - EOC	
Industry-->P/T-EOC	Request for information	Industry		Provincial - EOC	
	Resource allocation	Industry		Municipal	
	Resource availability	Industry		Provincial/ Territorial	
	Resource availability	Industry		Federal - PLD	
Industry --> GOC	Resource availability	Industry		GOC	
Industry-->GOC-Logistics	Resource availability	Industry		GOC - Logistics	
	Resource availability	Industry		Federal - PLD EOC	
	Resource availability	Industry		PS - Regional FCC	
Industry-->Municipal-EOC	Resource availability	Industry		Municipal - EOC	
	Resource availability	Industry		Provincial - EOC	
	Situation Report	Industry		Municipal	
	Situation Report	Industry		Provincial/ Territorial	
	Situation Report	Industry		Federal - PLD	
	Situation Report	Industry		GOC	
International Governments --> ITAC	Request for information	International Governments		ITAC	
	Situation Report	International Governments		ITAC	
IG-->Municipal-EOC	Situation Report	International Governments		Municipal - EOC	
IG-->P/T	Situation Report	International Governments		Provincial - EOC	
International Governments --> Federal - PLD	Situational Awareness	International Governments		Federal - PLD	
	Threat assessment	International Governments		ITAC	
ITAC --> International Governments	Request for information	ITAC		International Governments	
ITAC --> Federal - PLD	Request for information	ITAC		Federal - PLD	
ITAC --> GOC RA	Threat Assessment ITAC	ITAC		GOC	
	Threat Assessment ITAC	ITAC		International Governments	
	Threat Assessment ITAC	ITAC		Federal - PLD	
Media --> M	Emergency response public opinion	Media		Municipal	
Media --> PS Canada	Emergency response public opinion	Media		PS Canada	
Media --> Federal - PLD	Emergency response public opinion	Media		Federal - PLD	
	Emergency response public opinion	Media		Federal - PLD EOC	
Media-->PS-Regional FPCCG	Emergency response public opinion	Media		PS - Regional FPCCG	
Media-->PS-ADG CD	Emergency response public opinion	Media		PS - ADG CD	
Media-->Municipal-EOC	Emergency response public opinion	Media		Municipal - EOC	
Media-->Provincial EOC	Emergency response public opinion	Media		Provincial - EOC	
	Request for information	Media		PS Canada	
	Request for information	Media		Federal - PLD	
Media --> Federal - PLD EOC	Request for information	Media		Federal - PLD EOC	
	Request for information	Media		Municipal - EOC	
	Request for information	Media		Provincial - EOC	
Municipal --> Media	Media Lines	Municipal		Media	
Municipal --> Industry	Request for assistance	Municipal		Industry	
Municipal --> NGO	Request for assistance	Municipal		NGO	
M --> P/T	Request for assistance	Municipal		Provincial/ Territorial	Conduct Provincial/ Territorial EM response
	Request for information	Municipal		Industry	
	Request for information	Municipal		Provincial/ Territorial	
	Resource allocation	Municipal		Industry	
	Situation Report	Municipal		Industry	
	Situation Report	Municipal		NGO	
	Situation Report	Municipal		Provincial/ Territorial	
	Decision Brief	Municipal - EOC		Municipal - EOCG	
Municipal-EOC-->Media	Media Lines	Municipal - EOC		Media	
Municipal - EOC --> Municipal SD	Request for assistance	Municipal - EOC		Municipal - SD	
Municipal-EOC-->Provincial-Municipal LO	Request for assistance	Municipal - EOC		Provincial - Municipal LO	
Municipal-EOC-->Municipal Neighbouring	Request for assistance	Municipal - EOC		Municipal - Neighbouring Municipality	
Municipal-EOC-->NGO	Request for assistance	Municipal - EOC		NGO	
Municipal-EOC-->Industry	Request for assistance	Municipal - EOC		Industry	

Need Line	Information Exchange	Source Node	Source Activity	Destination Node	Destination Activity
	Request for information	Municipal - EOC		Municipal - SD	
	Request for information	Municipal - EOC		Provincial - Municipal LO	
	Request for information	Municipal - EOC		Municipal - Neighbouring Municipality	
	Request for information	Municipal - EOC		Industry	
Municipal-EOC-->GOC-Operations	Situation Report	Municipal - EOC		GOC - Ops	
	Situation Report	Municipal - EOC		Municipal - SD	
	Situation Report	Municipal - EOC		Provincial - Municipal LO	
Municipal-EOC-->Municipal-EOCG	Situation Report	Municipal - EOC		Municipal - EOCG	
	Situation Report	Municipal - EOC		Municipal - Neighbouring Municipality	
	Situation Report	Municipal - EOC		NGO	
	Situation Report	Municipal - EOC		Industry	
Municipal-EOC-->IG	Situation Report	Municipal - EOC		International Governments	
Municipal-EOCG-->Municipal Mayor	Decision Brief	Municipal - EOCG		Municipal - Mayor	
Municipal-EOCG-->Municipal EOC	Guidance	Municipal - EOCG		Municipal - EOC	
	Request for information	Municipal - EOCG		Municipal - EOC	
	Situation Report	Municipal - EOCG		Municipal - Mayor	
Municipal-LD EOC-->Municipal LD Municipal EOC LO	Request for assistance	Municipal - LD EOC		Municipal - LD Municipal EOC LO	
	Request for information	Municipal - LD EOC		Municipal - LD Municipal EOC LO	
	Situation Report	Municipal - LD EOC		Municipal - LD Municipal EOC LO	
Municipal-LD IC-->Public	Emergency Site Response	Municipal - LD IC		Public	
	Request for information	Municipal - LD Municipal EOC LO		Municipal - LD EOC	
	Resource availability	Municipal - LD Municipal EOC LO		Municipal - LD EOC	
Municipal-LD Municipal EOC LO-->Municipal-LD EOC	Situation Report	Municipal - LD Municipal EOC LO		Municipal - LD EOC	
Municipal-Mayor-->Municipal EOCG	Guidance	Municipal - Mayor		Municipal - EOCG	
	Request for information	Municipal - Mayor		Municipal - EOCG	
	Request for information	Municipal - Neighbouring Municipality		Municipal - EOC	
Municipal-Neighbouring-->Municipal-EOC	Resource allocation	Municipal - Neighbouring Municipality		Municipal - EOC	
	Situation Report	Municipal - Neighbouring Municipality		Municipal - EOC	
Municpal - SD --> Municipal - EOC	Request for information	Municipal - SD		Municipal - EOC	
	Resource allocation	Municipal - SD		Municipal - EOC	
	Situation Report	Municipal - SD		Municipal - EOC	
NGO-->PS-Regional FCC	Request for information	NGO		PS - Regional FCC	
	Request for information	NGO		Municipal - EOC	
	Request for information	NGO		Provincial - EOC	
NGO --> M	Resource allocation	NGO		Municipal	
NGO --> P/T	Resource allocation	NGO		Provincial/ Territorial	
NGO --> Federal - PLD	Resource allocation-1	NGO		Federal - PLD	
NGO-->GOC-Logistics	Resource availability	NGO		GOC - Logistics	
	Resource availability	NGO		PS - Regional FCC	
NGO-->Municipal-EOC	Resource availability	NGO		Municipal - EOC	
NGO-->P/T-EOC	Resource availability	NGO		Provincial - EOC	
	Situation Report	NGO		Municipal	
	Situation Report	NGO		Provincial/ Territorial	
	Situation Report	NGO		Federal - PLD	
	Decision Brief	Prime Minister		Cabinet	
PM --> PCO	Decision Brief	Prime Minister		Privy Council Office	
PM --> Cabinet	Request for information	Prime Minister		Cabinet	
	Request for information	Prime Minister		Privy Council Office	
PCO --> PM	Guidance	Privy Council Office		Prime Minister	
	Situational Awareness	Privy Council Office		Prime Minister	
P/T-EOC-->P/T-EOCG	Decision Brief	Provincial - EOC		Provincial - EOCG	
P/T-EOC-->Media	Media Lines	Provincial - EOC		Media	
P/T EOC-->Federal-PLD Regional LO	Request for assistance	Provincial - EOC		Federal - PLD Regional LO	
P/T EOC --> PS-Regional LO	Request for assistance	Provincial - EOC		PS - Regional Federal LO	

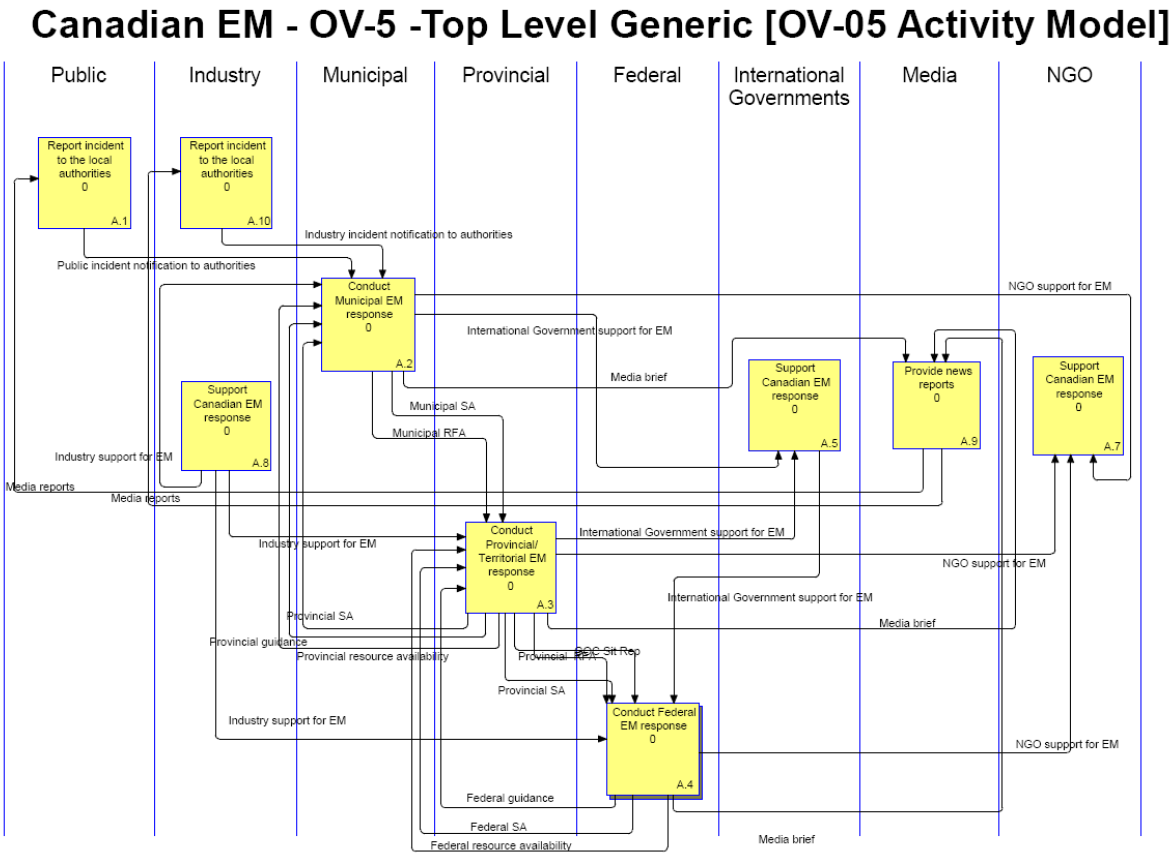
Need Line	Information Exchange	Source Node	Source Activity	Destination Node	Destination Activity
P/T-EOC-->Provincial-SD EOC	Request for assistance	Provincial - EOC		Provincial - SD EOC	
P/T-EOC-->P/T Neighbouring	Request for assistance	Provincial - EOC		Provincial - Neighbouring Province/Territory	
P/T-EOC-->NGO	Request for assistance	Provincial - EOC		NGO	
P/T-EOC-->Industry	Request for assistance	Provincial - EOC		Industry	
	Request for information	Provincial - EOC		Federal - PLD Regional LO	
	Request for information	Provincial - EOC		PS - Regional Federal LO	
P/T-EOC -->Municipal LO	Request for information	Provincial - EOC		Provincial - Municipal LO	
P/T-EOC-->Provincial-LD EOC LO	Request for information	Provincial - EOC		Provincial - LD EOC LO	
P/T-EOC-->Federal-PLD Regional LO	Request for information	Provincial - EOC		Federal - PLD Regional LO	
	Request for information	Provincial - EOC		Provincial - SD EOC	
	Request for information	Provincial - EOC		Provincial - Neighbouring Province/Territory	
	Request for information	Provincial - EOC		Industry	
	Resource availability	Provincial - EOC		Provincial - LD EOC LO	
	Resource availability	Provincial - EOC		Federal - PLD Regional LO	
	Situation Report	Provincial - EOC		Federal - PLD Regional LO	
	Situation Report	Provincial - EOC		PS - Regional Federal LO	
	Situation Report	Provincial - EOC		Provincial - Municipal LO	
	Situation Report	Provincial - EOC		Provincial - LD EOC LO	
	Situation Report	Provincial - EOC		Federal - PLD Regional LO	
	Situation Report	Provincial - EOC		Provincial - SD EOC	
	Situation Report	Provincial - EOC		Provincial - Neighbouring Province/Territory	
	Situation Report	Provincial - EOC		NGO	
	Situation Report	Provincial - EOC		Industry	
P/T-->IG	Situation Report	Provincial - EOC		International Governments	
	Situation Report	Provincial - EOC		Provincial - EOCG	
Provincial EOCG-->Premier	Decision Brief	Provincial - EOCG		Provincial - Premier	
P/T-EOCG-->P/T-EOC	Guidance	Provincial - EOCG		Provincial - EOC	
	Situation Report	Provincial - EOCG		Provincial - Premier	
Provincial-LD EOC-->Provincial LD EOC LO	Request for assistance	Provincial - LD EOC		Provincial - LD EOC LO	
Provincial-LD EOC-->Provincial-SD EOC	Request for assistance	Provincial - LD EOC		Provincial - SD EOC	
	Request for information	Provincial - LD EOC		Provincial - SD EOC	
	Situation Report	Provincial - LD EOC		Provincial - LD EOC LO	
	Situation Report	Provincial - LD EOC		Provincial - SD EOC	
	Request for assistance	Provincial - LD EOC LO		Provincial - EOC	
Provincial-LD EOC LO-->Provincial LD EOC	Request for information	Provincial - LD EOC LO		Provincial - LD EOC	
Provincial-LD EOC LO-->P/T-EOC	Request for information	Provincial - LD EOC LO		Provincial - EOC	
	Resource availability	Provincial - LD EOC LO		Provincial - LD EOC	
	Situation Report	Provincial - LD EOC LO		Provincial - LD EOC	
	Situation Report	Provincial - LD EOC LO		Provincial - EOC	
Provincial-LD IC-->Public	Emergency Site Response	Provincial - LD IC		Public	
Provincial-Municipal LO-->P/T-EOC	Request for assistance	Provincial - Municipal LO		Provincial - EOC	
	Request for information	Provincial - Municipal LO		Municipal - EOC	
	Request for information	Provincial - Municipal LO		Provincial - EOC	
Provincial-Municipal LO-->Municipal EOC	Resource availability	Provincial - Municipal LO		Municipal - EOC	
	Situation Report	Provincial - Municipal LO		Municipal - EOC	
	Situation Report	Provincial - Municipal LO		Provincial - EOC	
	Request for information	Provincial - Neighbouring Province/Territory		Provincial - EOC	
P/T Neigbouring-->P/T-EOC	Resource allocation	Provincial - Neighbouring Province/Territory		Provincial - EOC	
	Situation Report	Provincial - Neighbouring Province/Territory		Provincial - EOC	

Need Line	Information Exchange	Source Node	Source Activity	Destination Node	Destination Activity
Provincial-Premier-->EOCG	Guidance	Provincial - Premier		Provincial - EOCG	
	Request for information	Provincial - Premier		Provincial - EOCG	
Provincial-SD EOC-->P/T-EOC	Request for information	Provincial - SD EOC		Provincial - EOC	
	Request for information	Provincial - SD EOC		Provincial - LD EOC	
	Resource allocation	Provincial - SD EOC		Provincial - EOC	
Provincial-SD EOC-->Provincial-LD EOC	Resource allocation	Provincial - SD EOC		Provincial - LD EOC	
	Situation Report	Provincial - SD EOC		Provincial - EOC	
	Situation Report	Provincial - SD EOC		Provincial - LD EOC	
P/T --> Media	Media Lines	Provincial/ Territorial		Media	
P/T --> I	Request for assistance	Provincial/ Territorial		Industry	
P/T --> NGO	Request for assistance	Provincial/ Territorial		NGO	
P/T--> PS Canada	Request for assistance	Provincial/ Territorial		PS Canada	
	Request for information	Provincial/ Territorial		Industry	
	Request for information	Provincial/ Territorial		Municipal	
	Request for information	Provincial/ Territorial		PS Canada	
	Resource allocation	Provincial/ Territorial		Industry	
P/T --> M	Resource availability	Provincial/ Territorial		Municipal	
	Situation Report	Provincial/ Territorial		Industry	
	Situation Report	Provincial/ Territorial		NGO	
	Situation Report	Provincial/ Territorial		Municipal	
	Situation Report	Provincial/ Territorial		PS Canada	
P/T EOC -->GOC-Operations	Request for assistance	Provincial/ Territorial - EOC		GOC - Ops	
	Request for information	Provincial/ Territorial - EOC		GOC - Ops	
P/T-EOC-->GOC-Logistics	Resource availability	Provincial/ Territorial - EOC		GOC - Logistics	
	Situation Report	Provincial/ Territorial - EOC		GOC - Ops	
PS-ADG CD --> PS-Regional FPCCG	Guidance	PS - ADG CD		PS - Regional FPCCG	
PS-ADG-CD --> Media	Media Lines	PS - ADG CD		Media	
	Media Lines	PS - ADG CD		PS - Regional FPCCG	
PS DG OD --> GOC Planning	Planning Guidance	PS - DG OD	Provide Planning Guidance to GOC - Planning DG OD Manage GOC	GOC - Planning	Develop objectives, COA for Action Plan GOC Planning Facilitates Planning
PS-Regional --> FCO	Request for assistance	PS - Federal Regional Component		PS - FCO	
	Situational Awareness	PS - Federal Regional Component		PS - FCO	
PS-Regional FCC-->Industry	Request for assistance	PS - Regional FCC		Industry	
PS-Regional FCC-->NGO	Request for assistance	PS - Regional FCC		NGO	
	Request for information	PS - Regional FCC		Industry	
	Request for information	PS - Regional FCC		NGO	
	Request for information	PS - Regional Federal LO		Provincial - EOC	
PS-Regional LO --> P/T EOC	Resource availability	PS - Regional Federal LO		Provincial - EOC	
	Situation Report	PS - Regional Federal LO		Provincial - EOC	
PS-Regional FPCCG --> Media	Media Lines	PS - Regional FPCCG		Media	
PS Canada --> Media	Media Lines	PS Canada		Media	
PS Canada --> Federal SD	Request for assistance	PS Canada		Federal - SD	
PS Canada --> GOC	Request for information	PS Canada		GOC	
PS Canada --> P/T	Request for information	PS Canada		Provincial/ Territorial	
	Request for information	PS Canada		Federal - PLD	
	Resource availability	PS Canada		Provincial/ Territorial	
PS Canada --> Federal - PLD	Resource availability	PS Canada		Federal - PLD	
	Situation Report	PS Canada		Provincial/ Territorial	
	Emergency response public opinion	Public		Provincial/ Territorial	
Public --> Municipal	Emergency response public opinion	Public		Municipal	
P --> P/T	Public notification (ie 911)	Public		Provincial/ Territorial	
	Public notification (ie 911)	Public		Municipal	
	Request for information	Public		Provincial/ Territorial	
	Request for information	Public		Municipal	

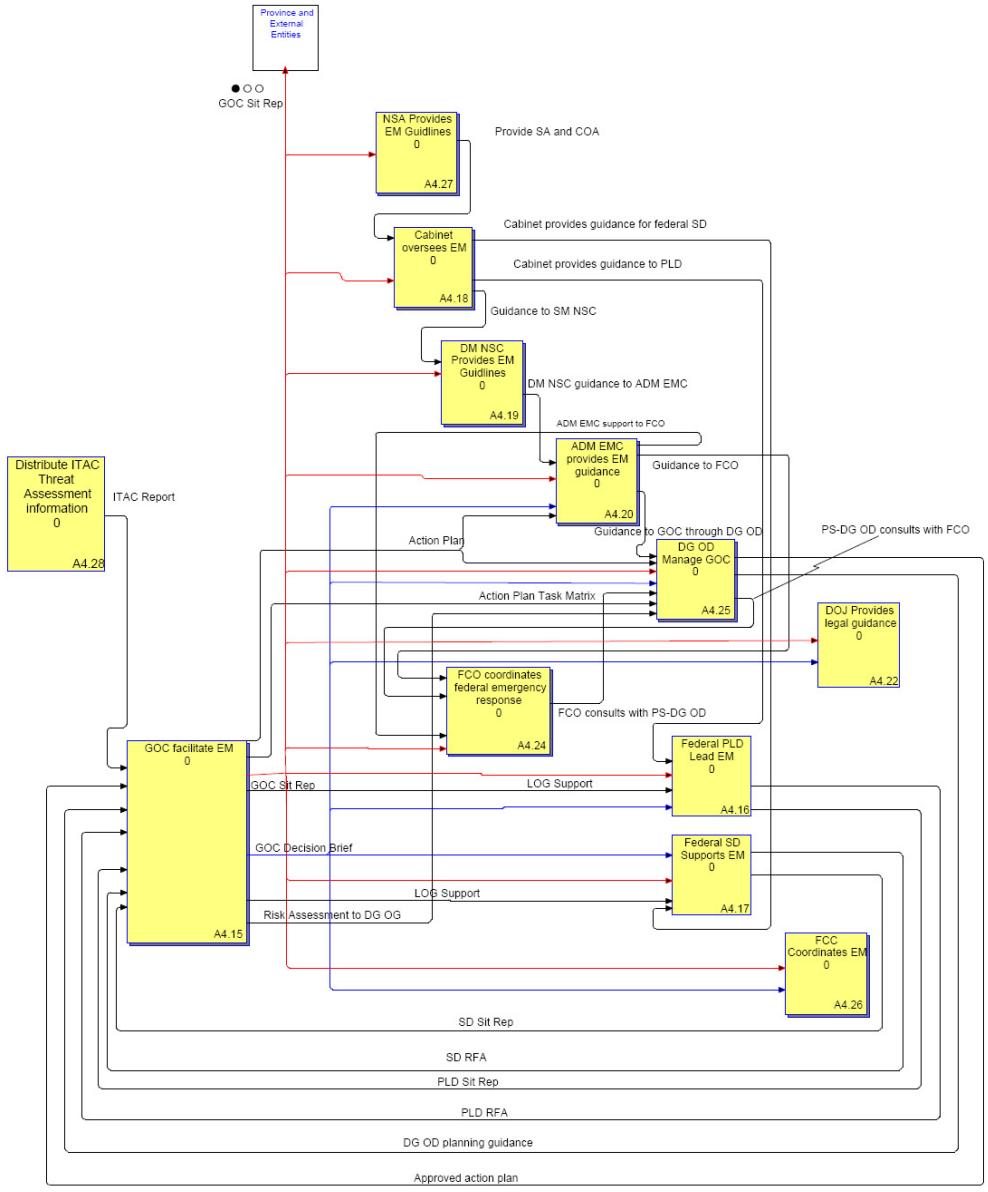
Annex E OV-5

This annex contains the PSTP Canadian EM OV-5. The OV-5 was generated using two baseline documents: the FERP and the TCL as outlined in section 3.1.5 of this document.

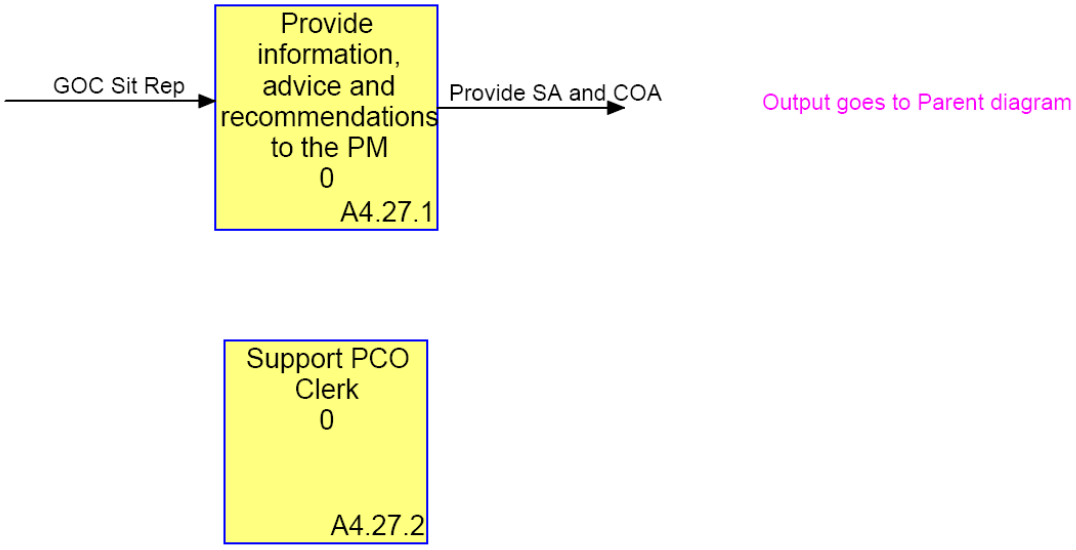
E.1 High-Level Activity Models and Node Trees using the FERP



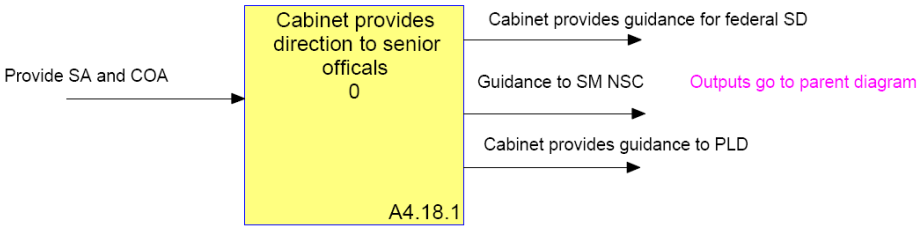
Canadian EM - OV-5 - Federal Internal conduct EM [OV-05 Activity Model]



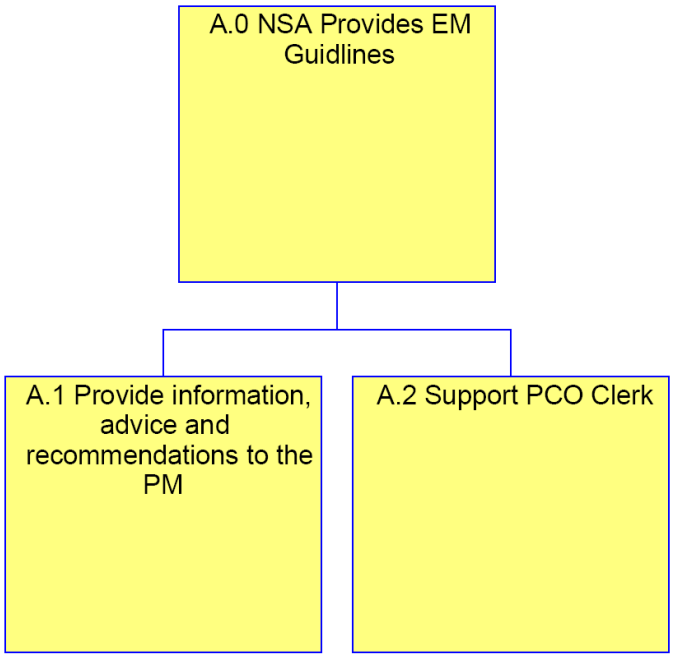
Canadian EM - OV-5 - NSA Provides EM Guidlines [OV-05 Activity Model]



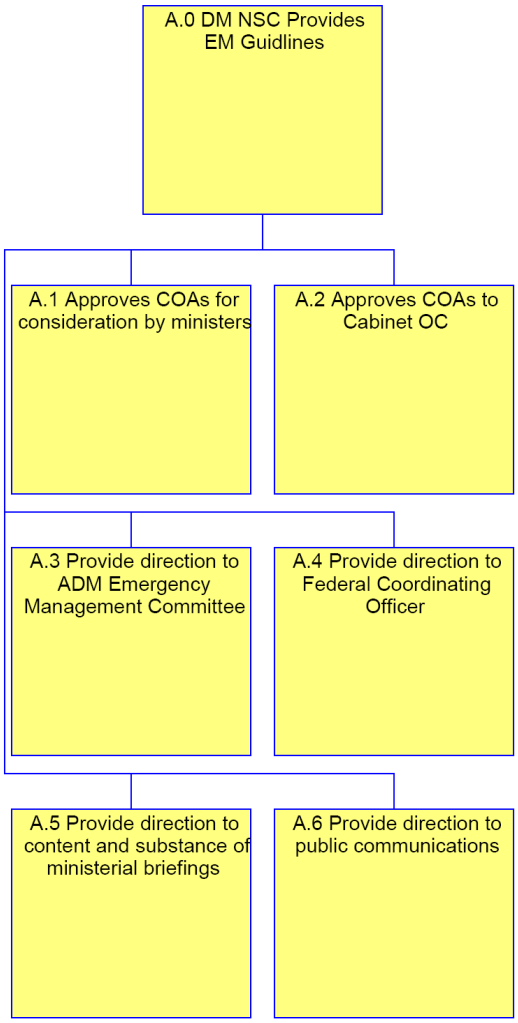
Canadian EM - OV-5 - Cabinet oversees EM [OV-05 Activity Model]



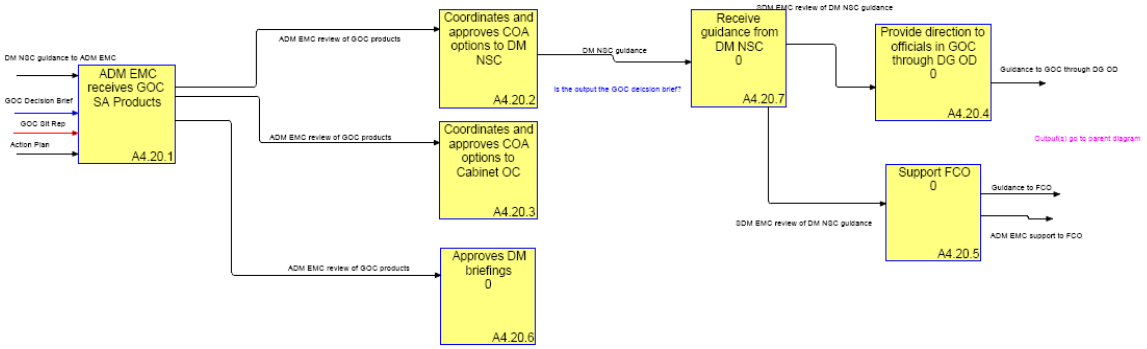
Canadian EM - OV-5 - NSA Provides EM Guidlines [OV-05 Node Tree]



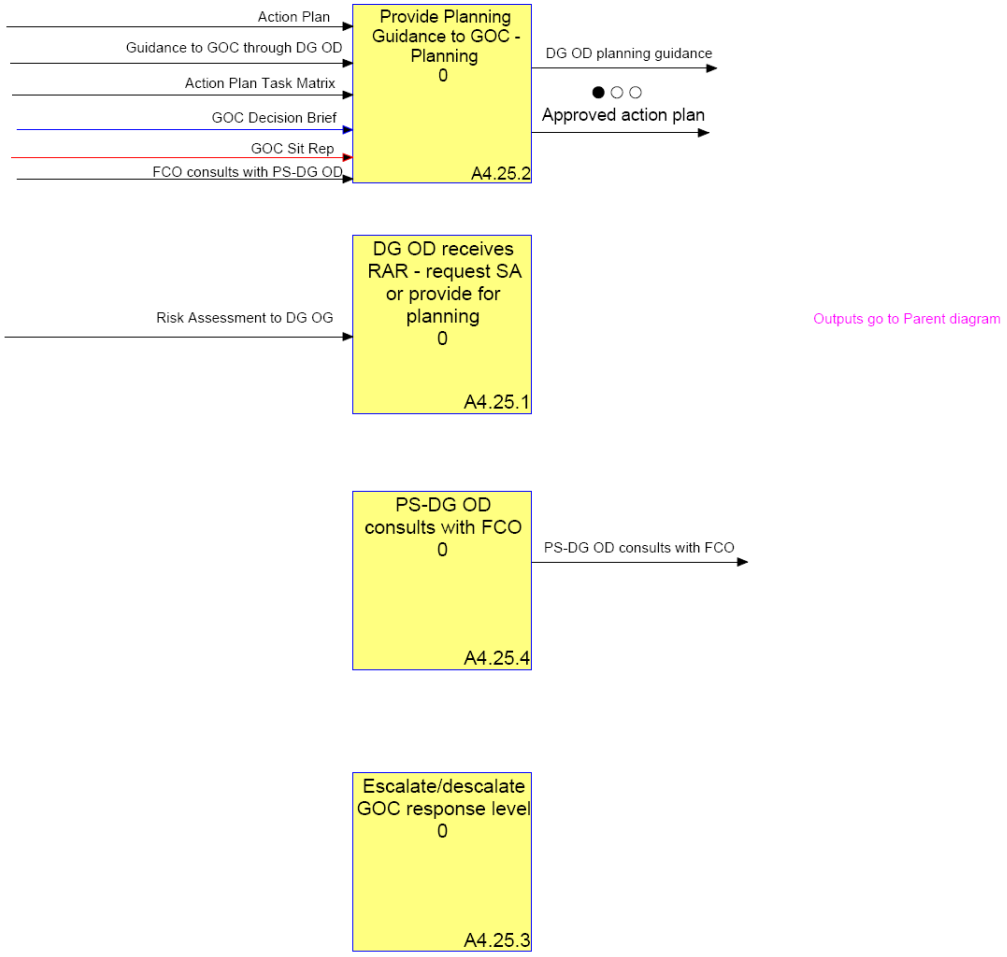
Canadian EM - OV-5 - DM NSC Provides EM Guidlines [OV-05 Node Tree]



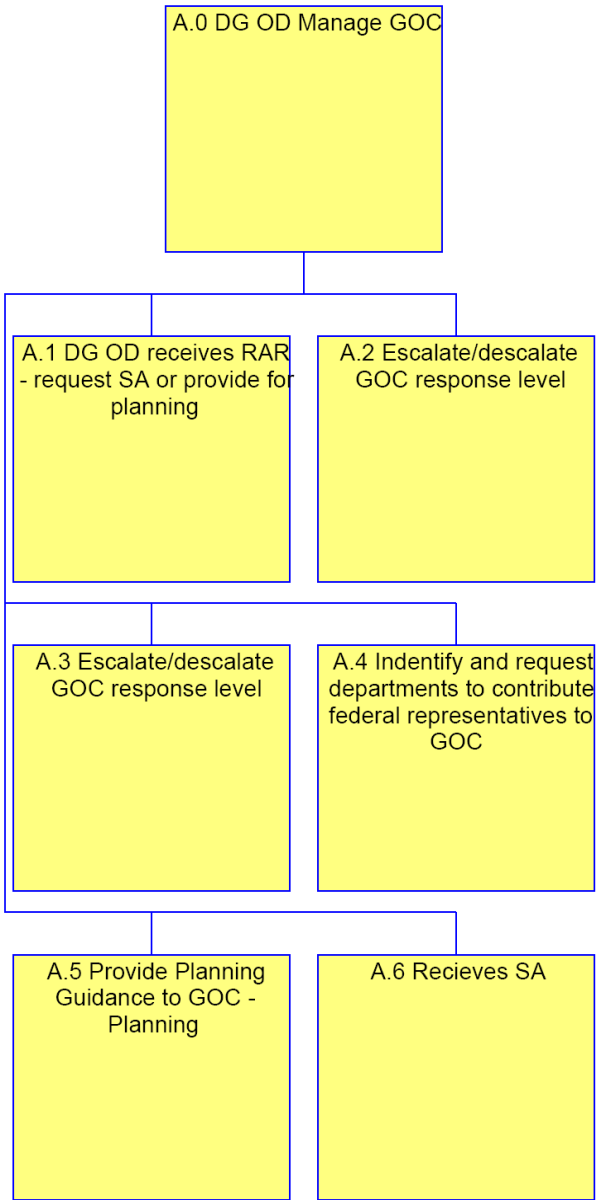
Canadian EM - OV-5 - ADM EMC provides EM guidance [OV-0
Activity Model]



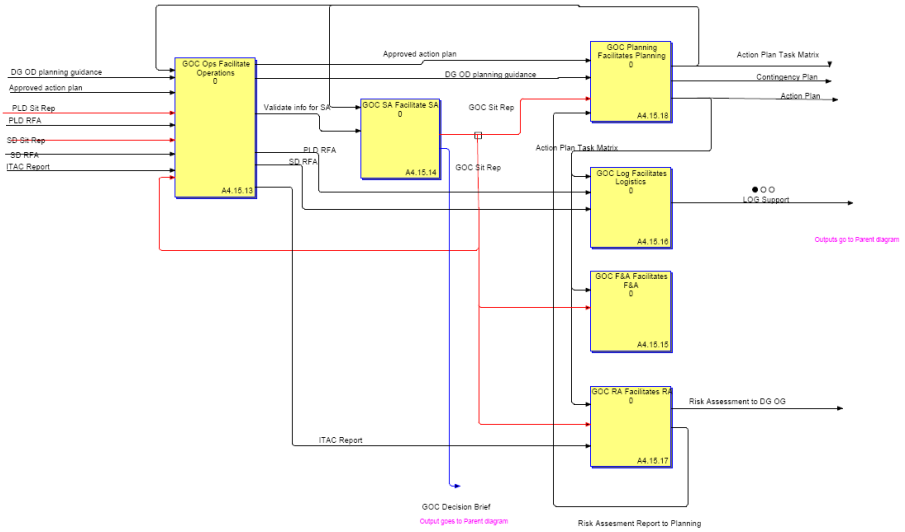
Canadian EM - OV-5 - DG OD Manage GOC [OV-05 Activity Model]



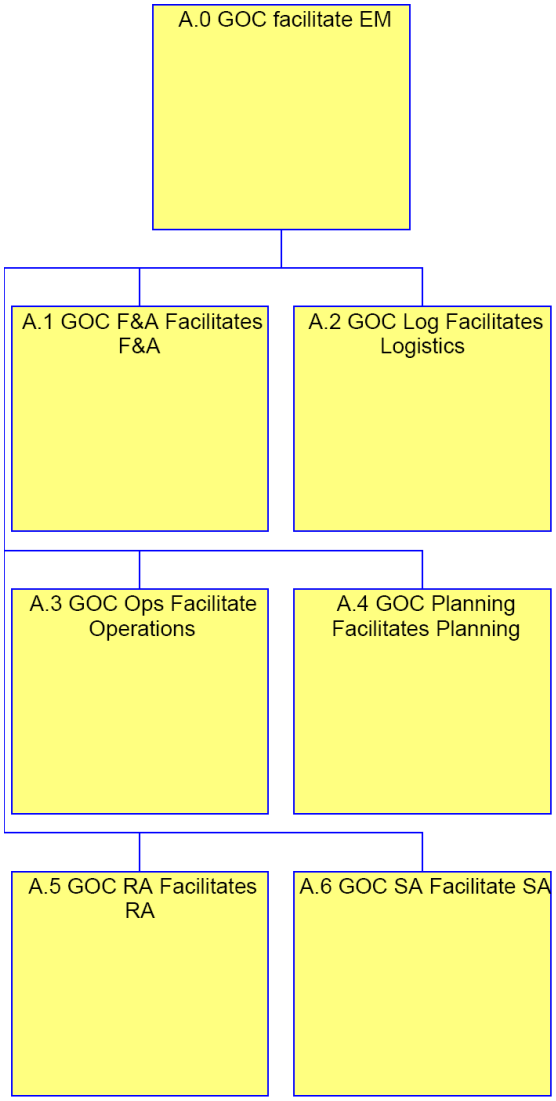
Canadian EM - OV-5- DG OD Manage GOC [OV-05 Node Tree]



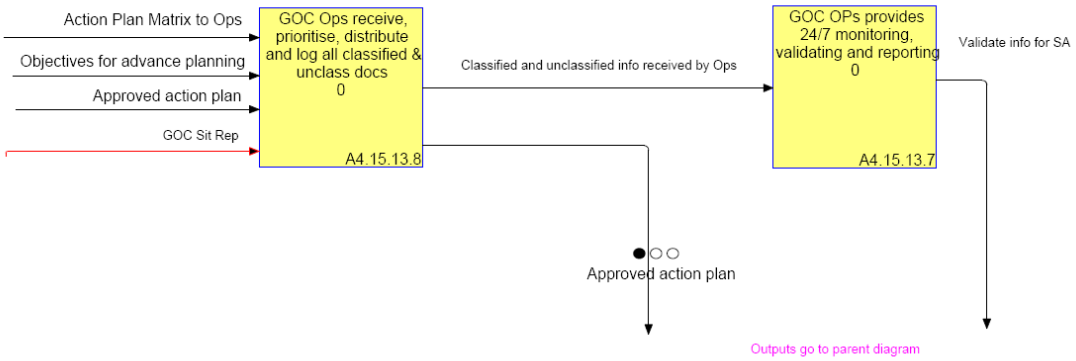
Canadian EM - OV-5 - GOC facilitate EM [OV-05 Activity Model]



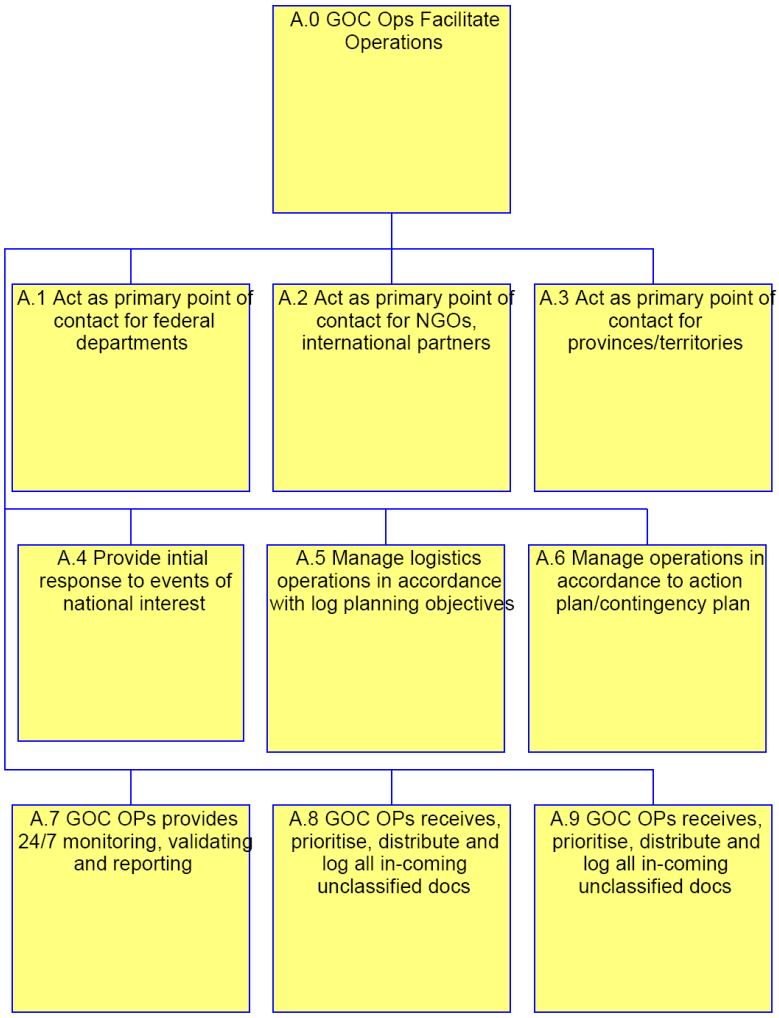
Canadian EM - OV-5 - GOC facilitate EM [OV-05 Node Tree]



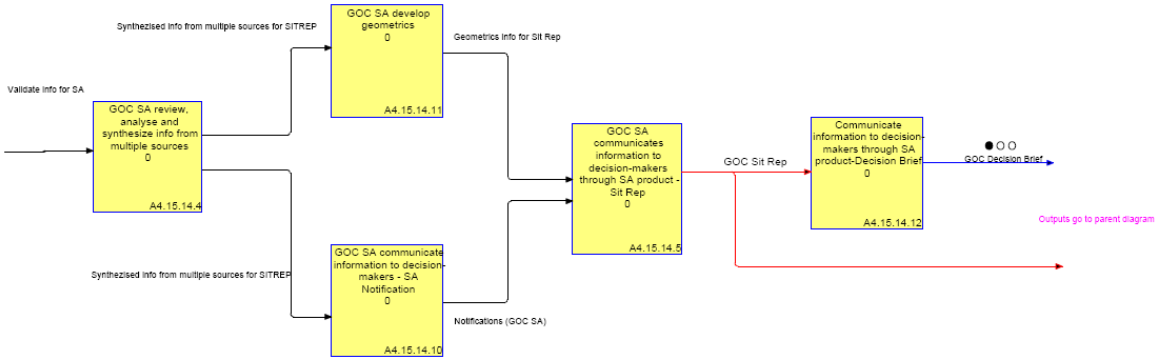
Canadian EM - OV-5 - GOC Ops Facilitate Oprations [OV-05 Activity Model]



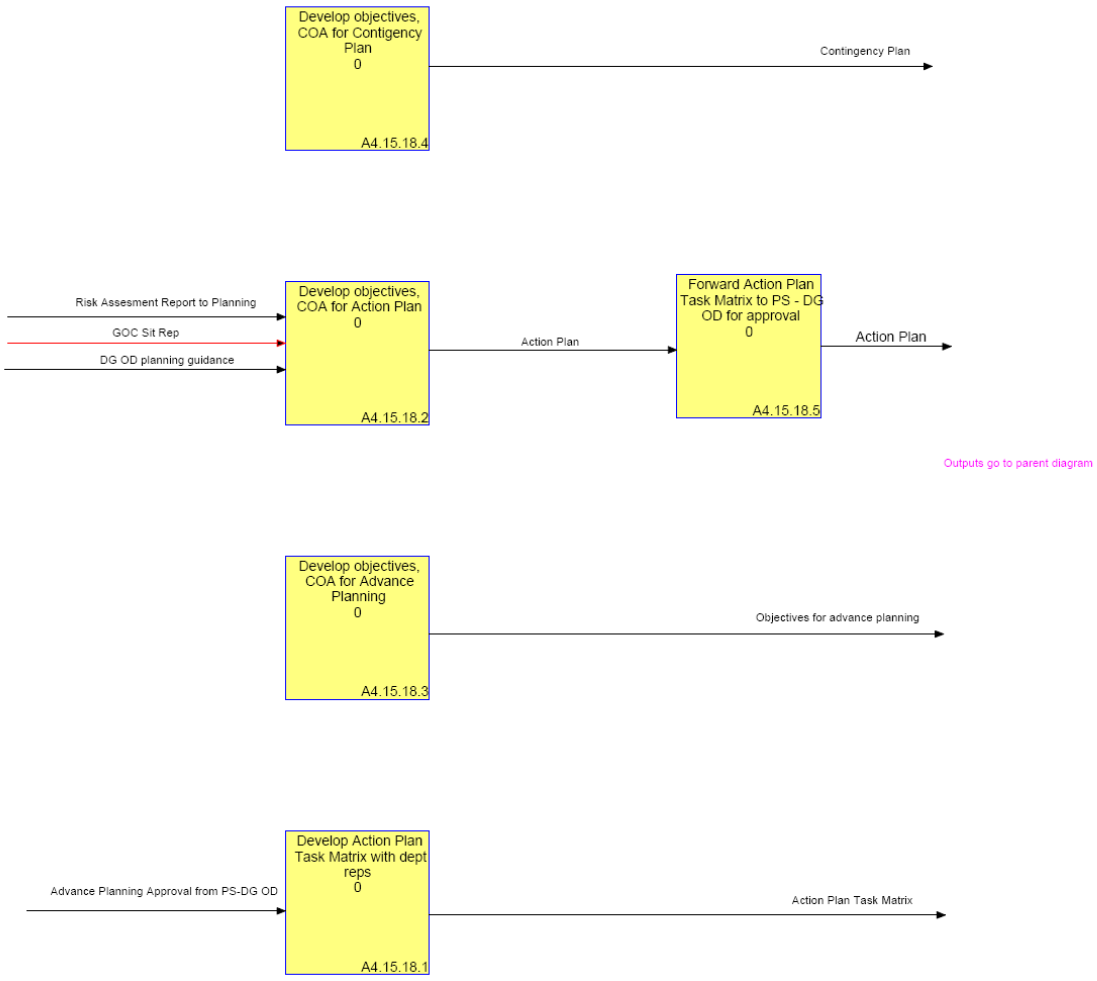
Canadian EM - OV-5 - GOC Ops Facilitate Oprations [OV-05 Node Tree]



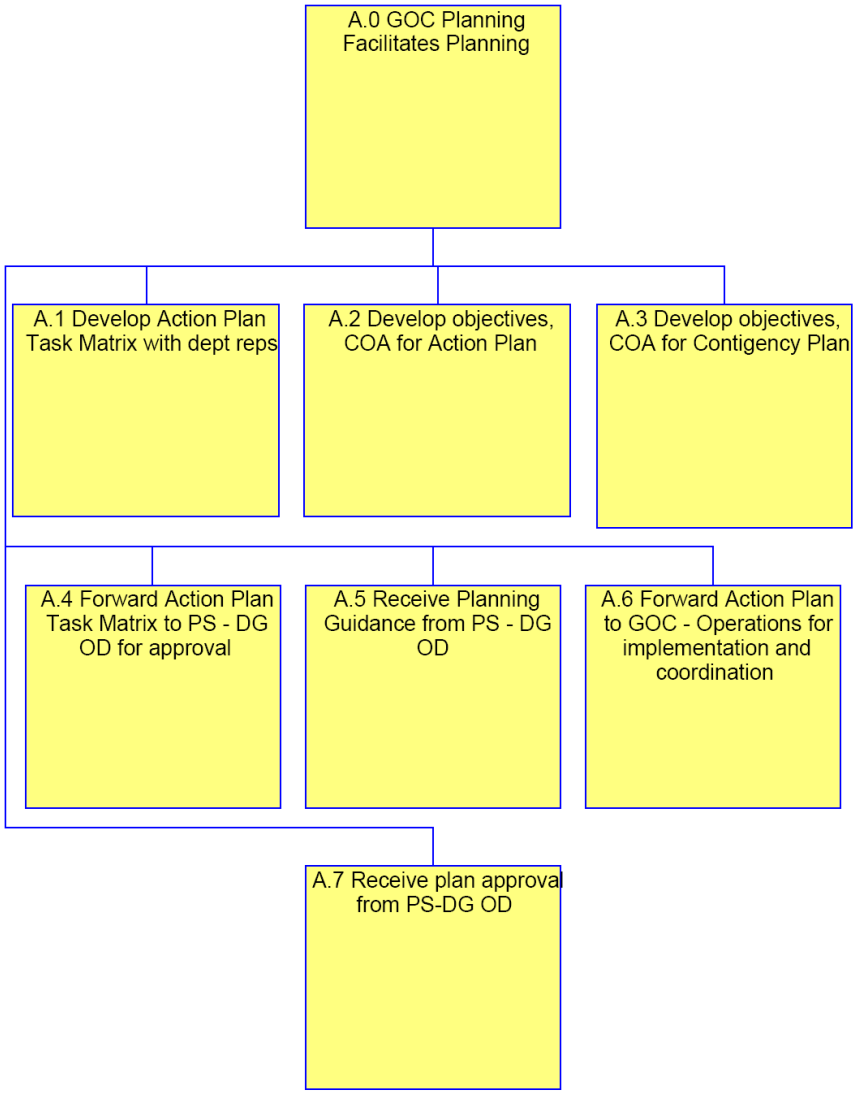
Canadian EM - OV-5 - GOC SA Facilitate SA [OV-05 Activity Model]



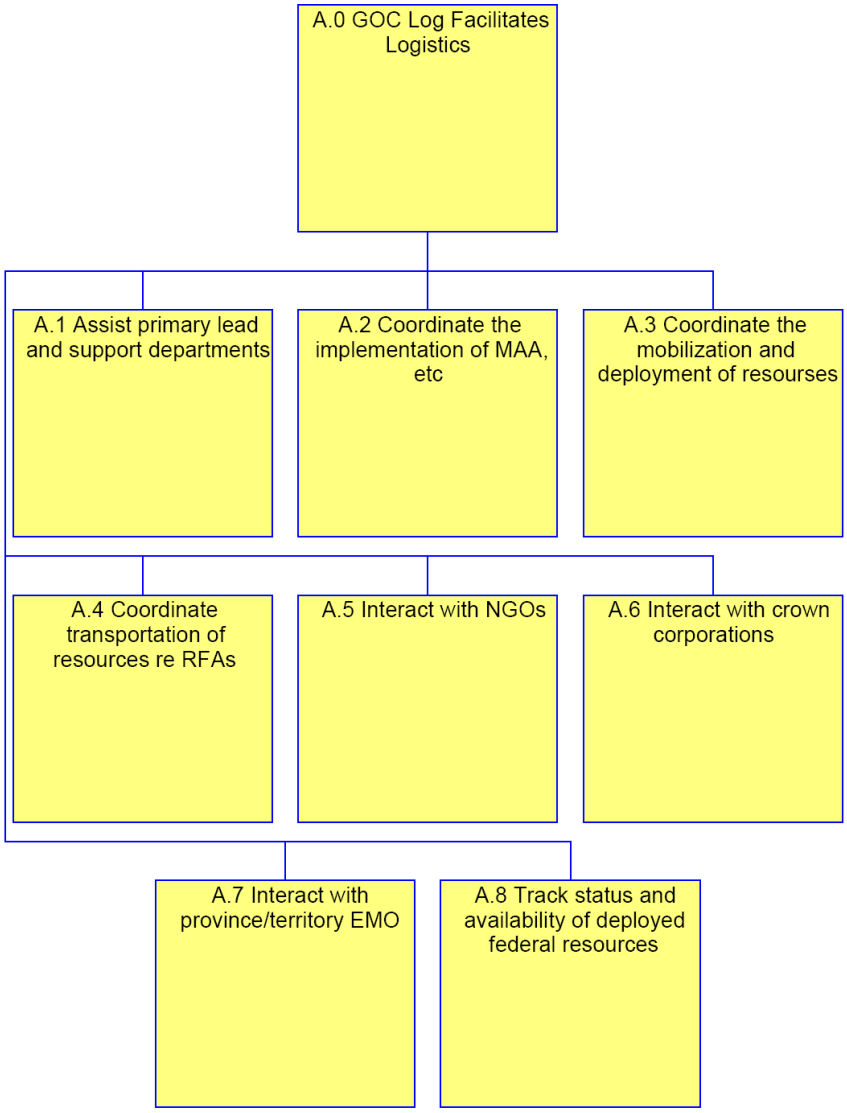
Canadian EM - OV-5 - GOC Planning Facilitates Planning [OV-05 Activity Model]



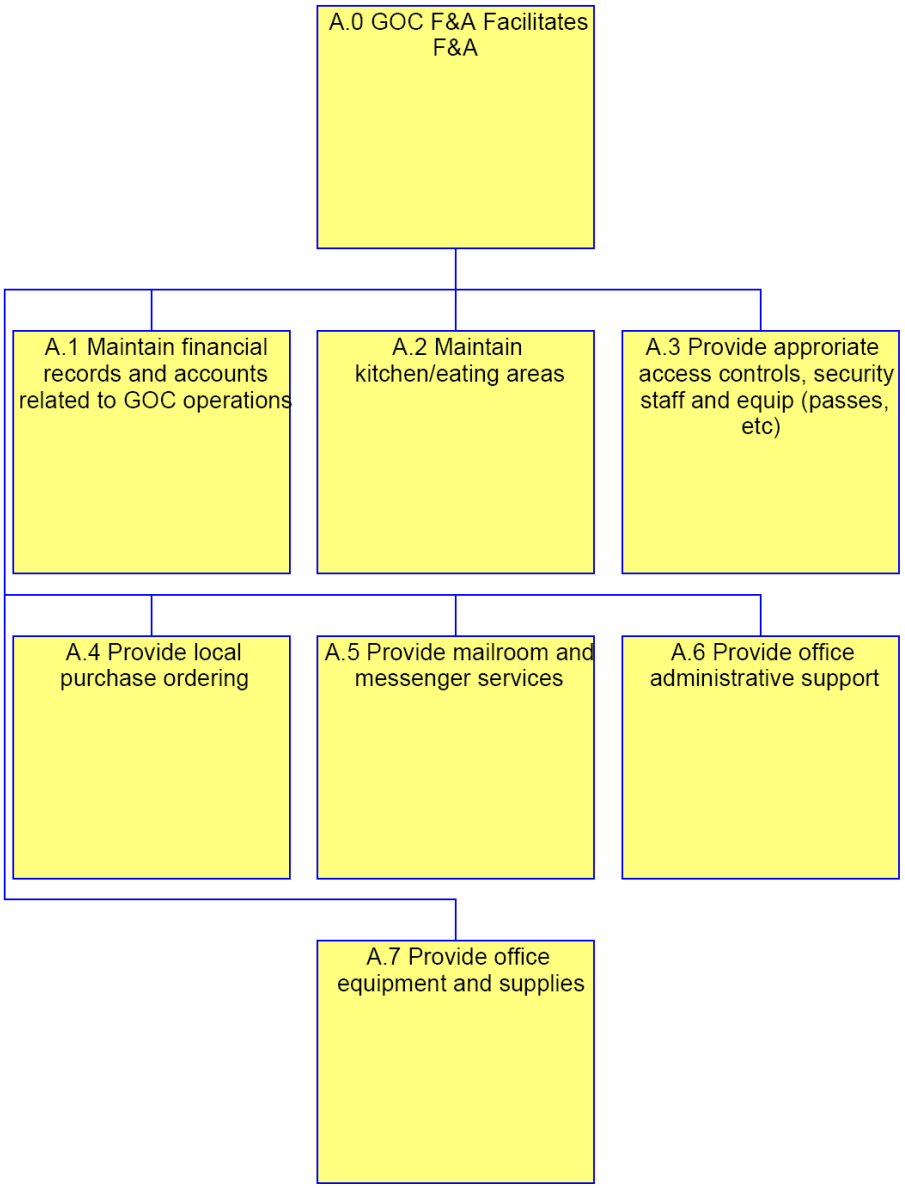
Canadian EM - OV-5 - GOC Planning Facilitates Planning [OV-05 Node Tree]



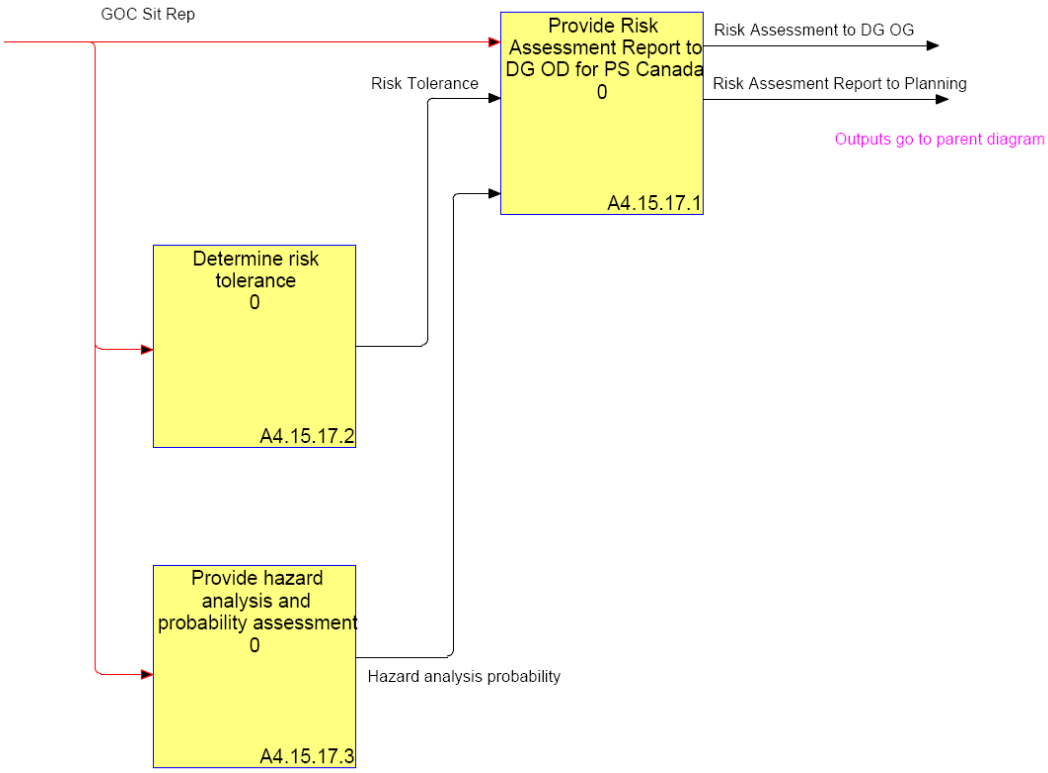
Canadian EM - OV-5 - GOC Log Facilitates Logistics [OV-05 Node Tree]



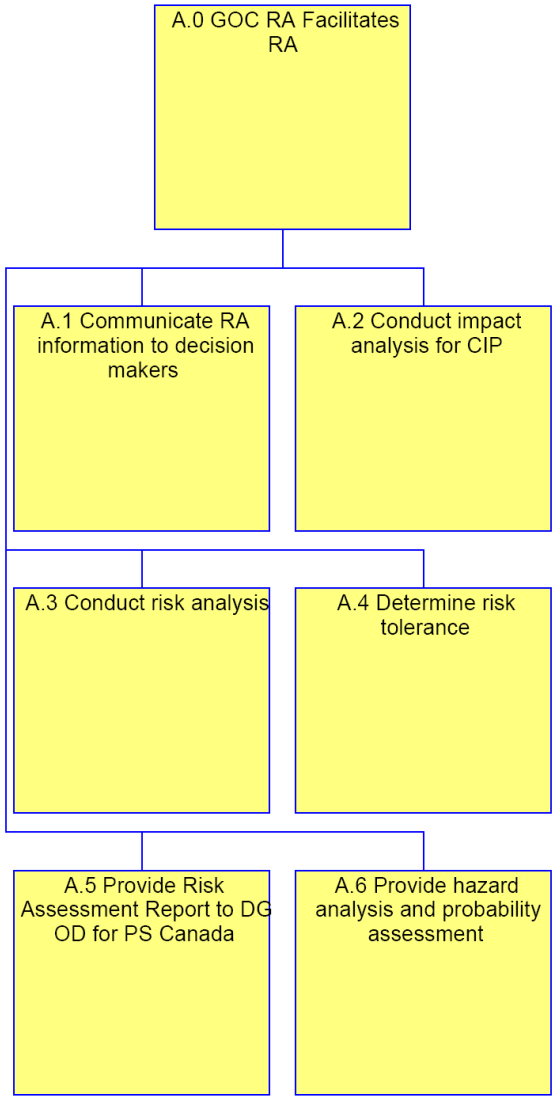
Canadian EM - OV-5 - GOC F&A Facilitates F&A [OV-05 Node Tree]



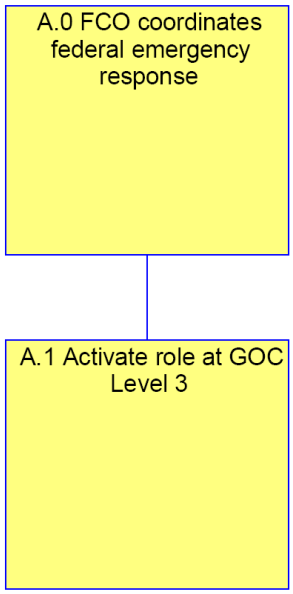
Canadian EM - OV-5 - GOC RA Facilitates RA [OV-05 Activity Model]



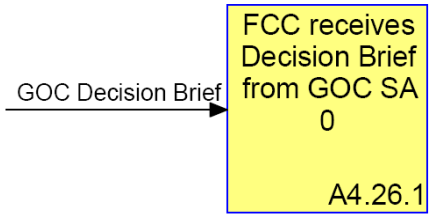
Canadian EM - OV-5 - GOC RA Facilitates RA [OV-05 Node Tree]



Canadian EM - OV-5 - FCO coordinates fed. emergency response [OV-05 Node Tree]



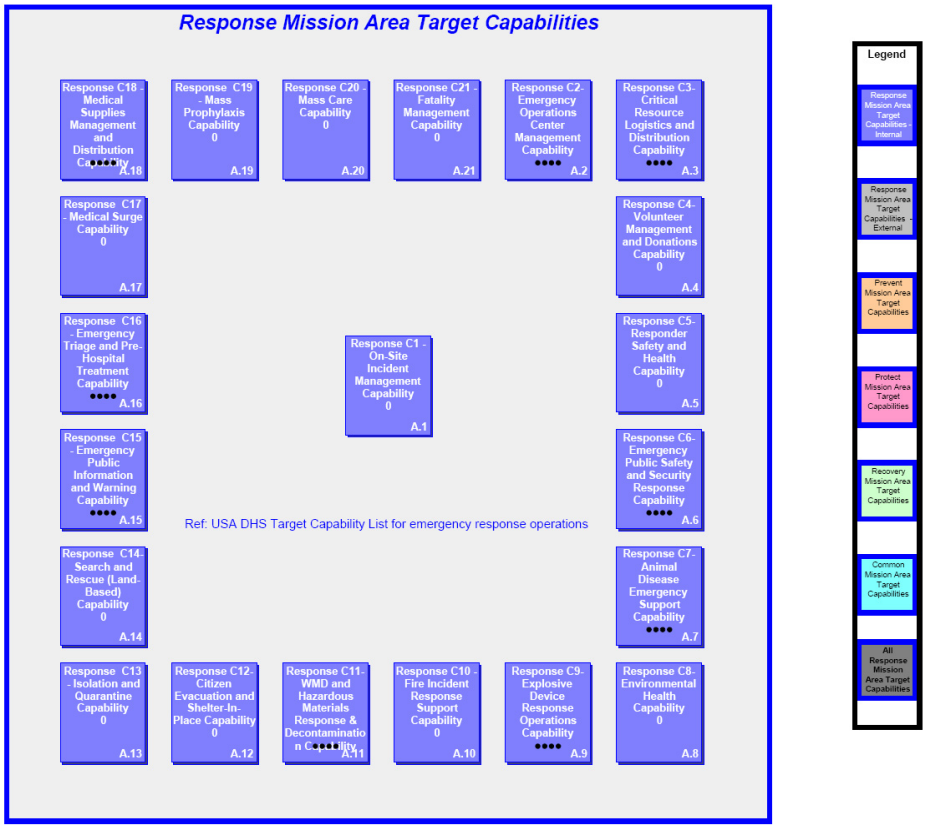
Canadian EM - OV-5 - FCC Cordinates EM [OV-05 Activity Model]



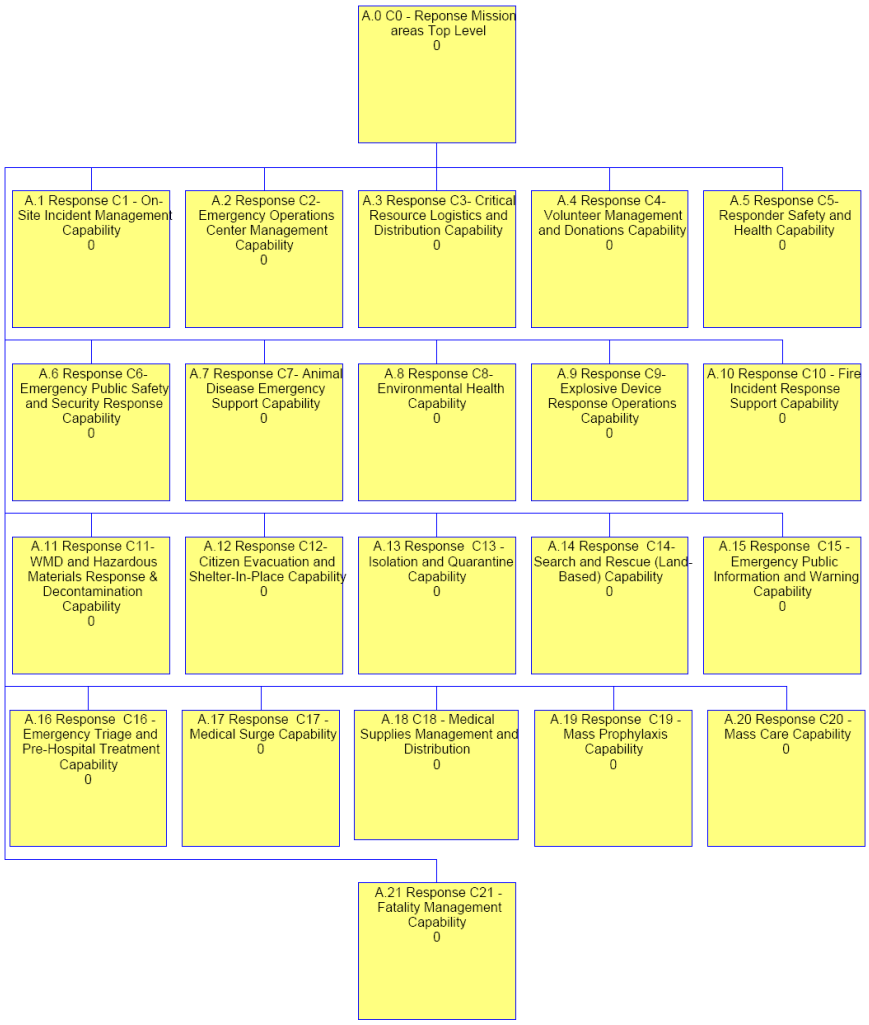
E.2 High-Level Activity Models and Node Trees using the TCL

Figure 23: PSTP Canadian EM Generic Response OV-5 TCL Legend

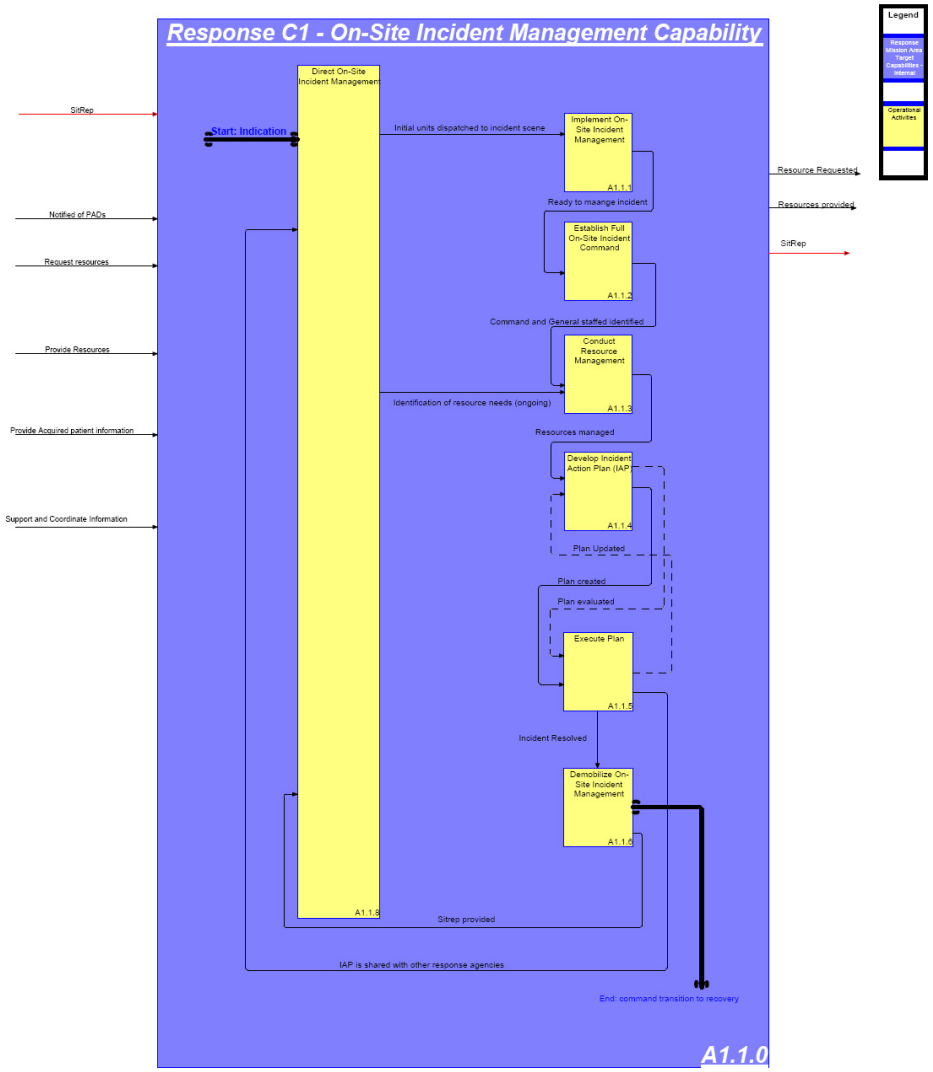
Response C0 - OV-5 - Respond Mission Area Target Capabilities Top Level [OV-05 Activity Model]



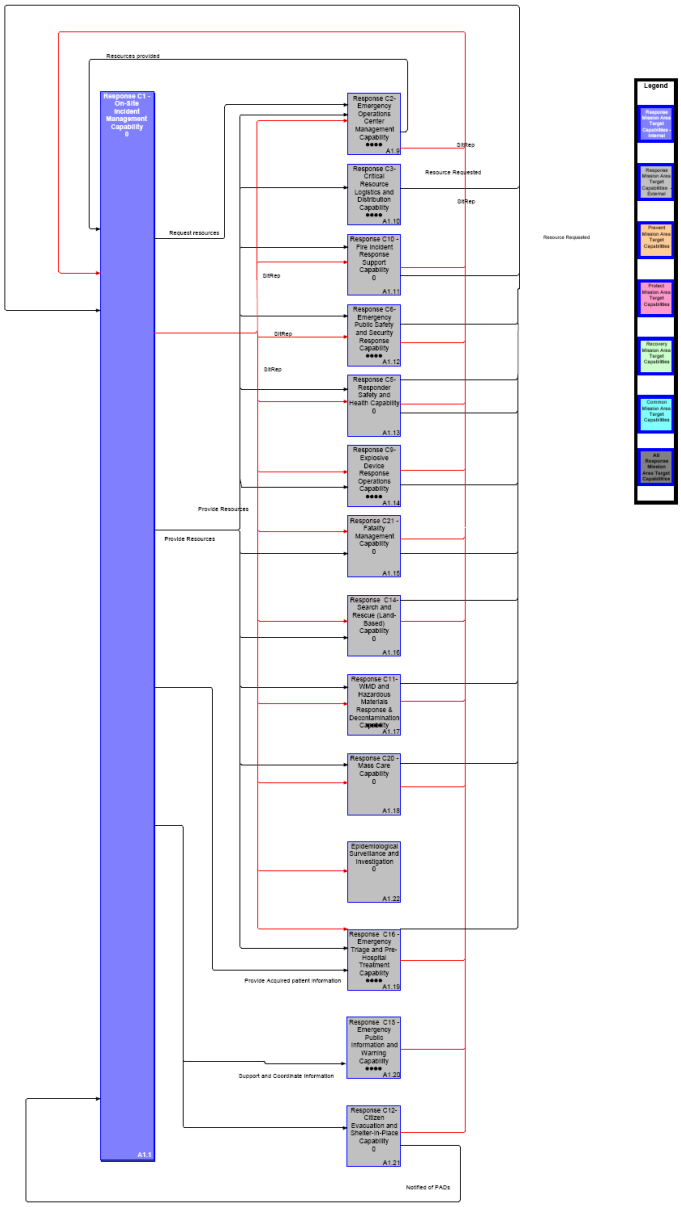
Response C0 - OV-5 - Respond Mission Area Target Capabilities Top Level [OV-05 Node Tree]



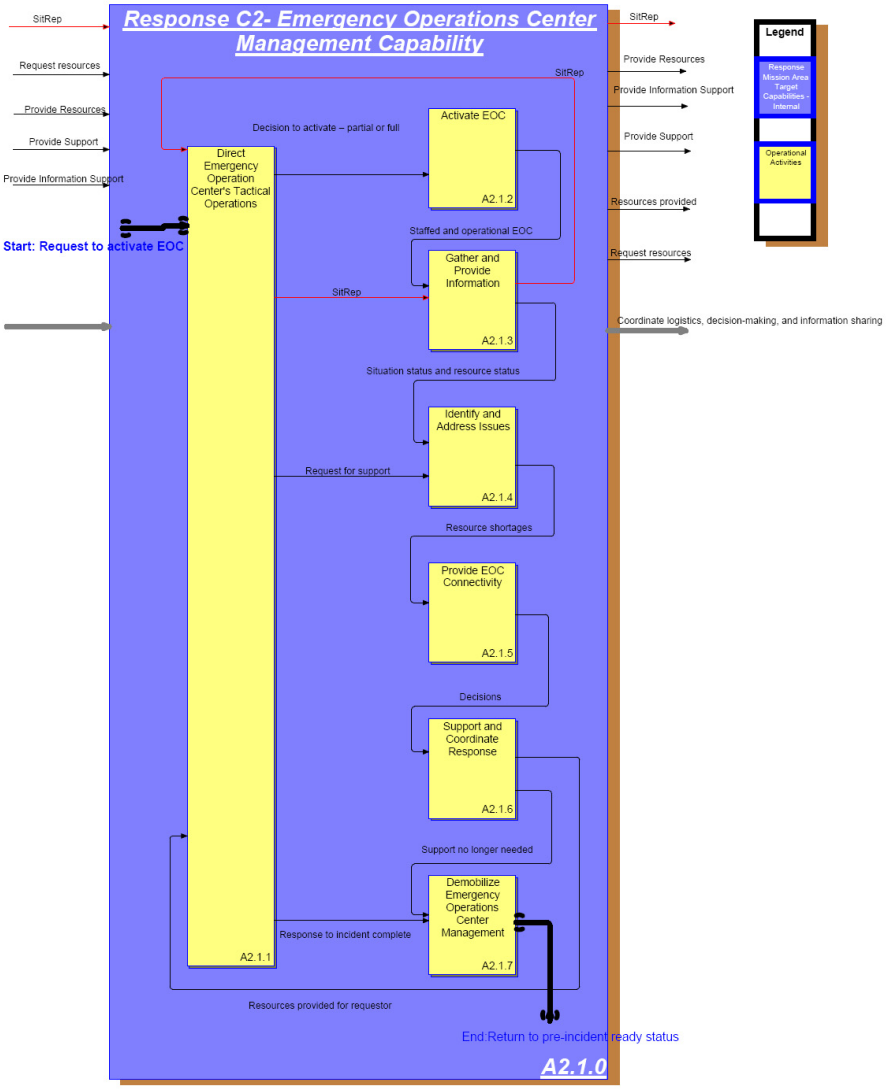
Response C1 - OV-5 - On-Site Incident Management (Activity Process Flow) [OV-05 Activity Model]



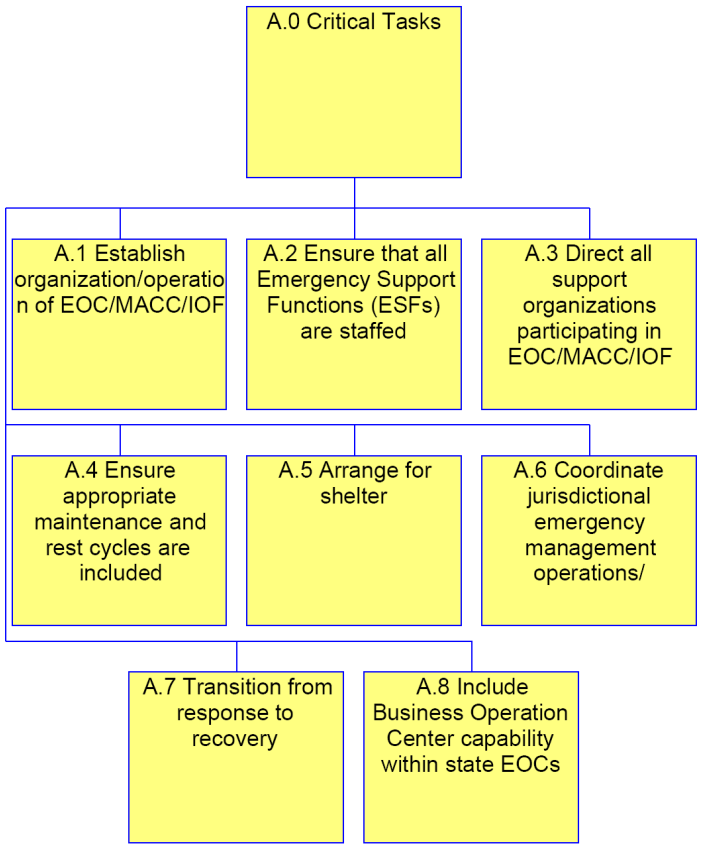
Response C1 - OV-5 - Onsite Incident Managemnt Links to other Capabilities [OV-05 Activity Model]



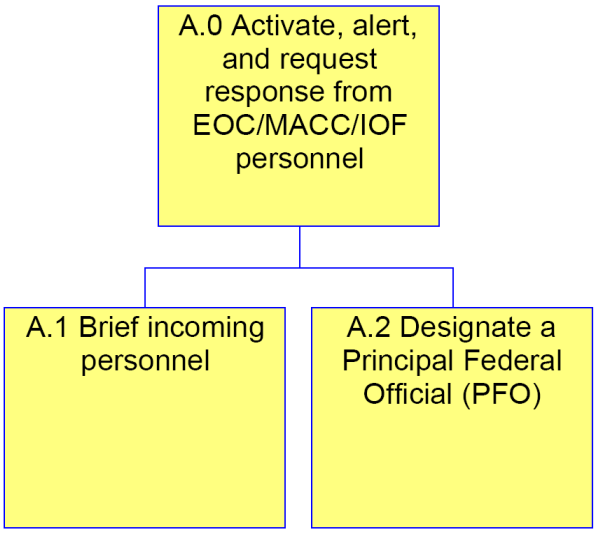
Response C2 - OV-5 - Emergency Ops Center Management (Activity Process Flow) [OV-05 Activity Model]



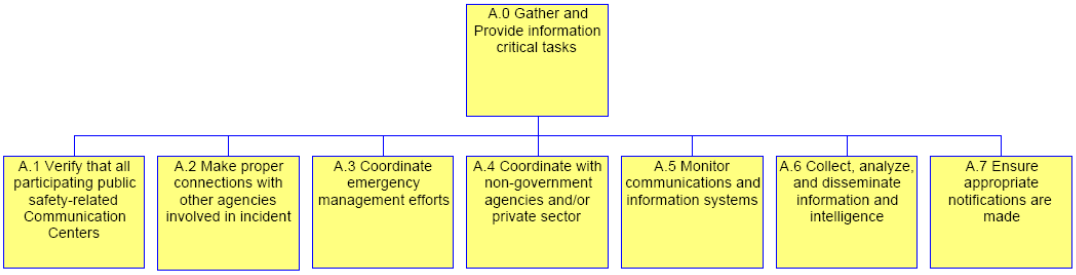
Response C2- OV-5 Direct Emergency Operation Center Tactical Ops Critical tasks [OV-05 Node Tree]



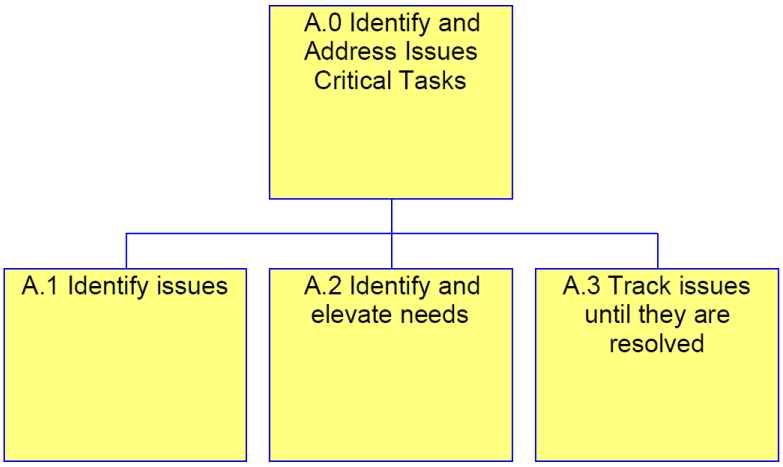
Response C2- OV-5 Activate EOC Critical tasks [OV-05 Node Tree]



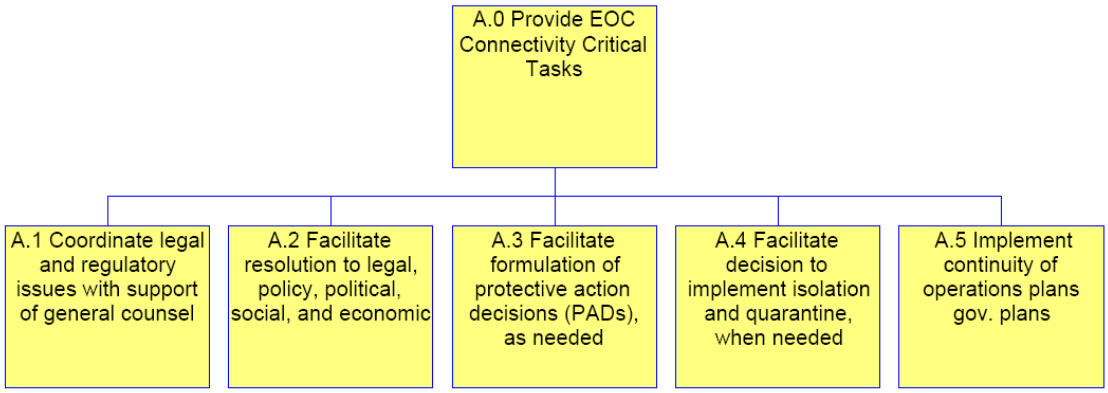
Response C2- OV-5 Gather and Provide Information Critical Tasks [OV-05 Node Tree]



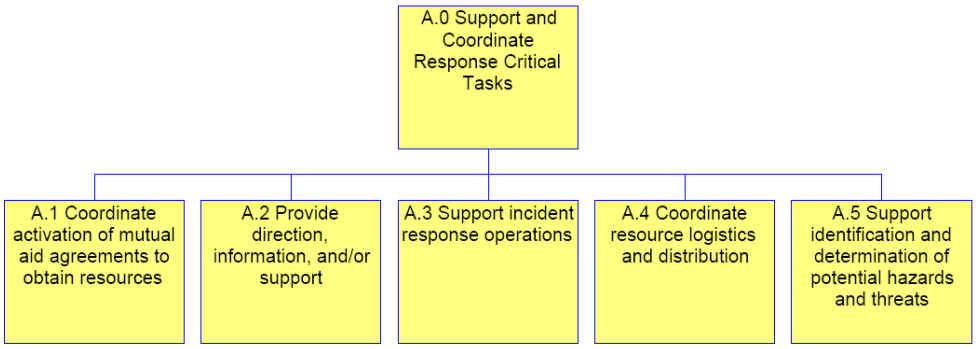
Response C2- OV-5 Identify and Address Issues Critical Tasks [OV-05 Node Tree]



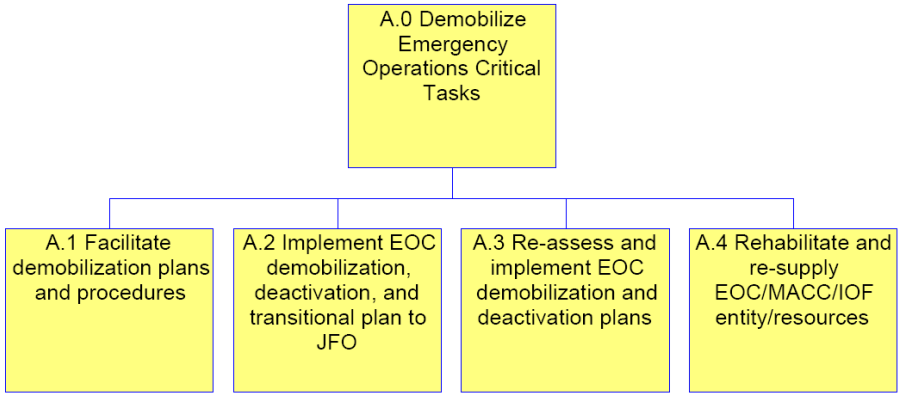
Response C2- OV-5 Provide EOC Connectivity Critical Tasks [OV-05 Node Tree]



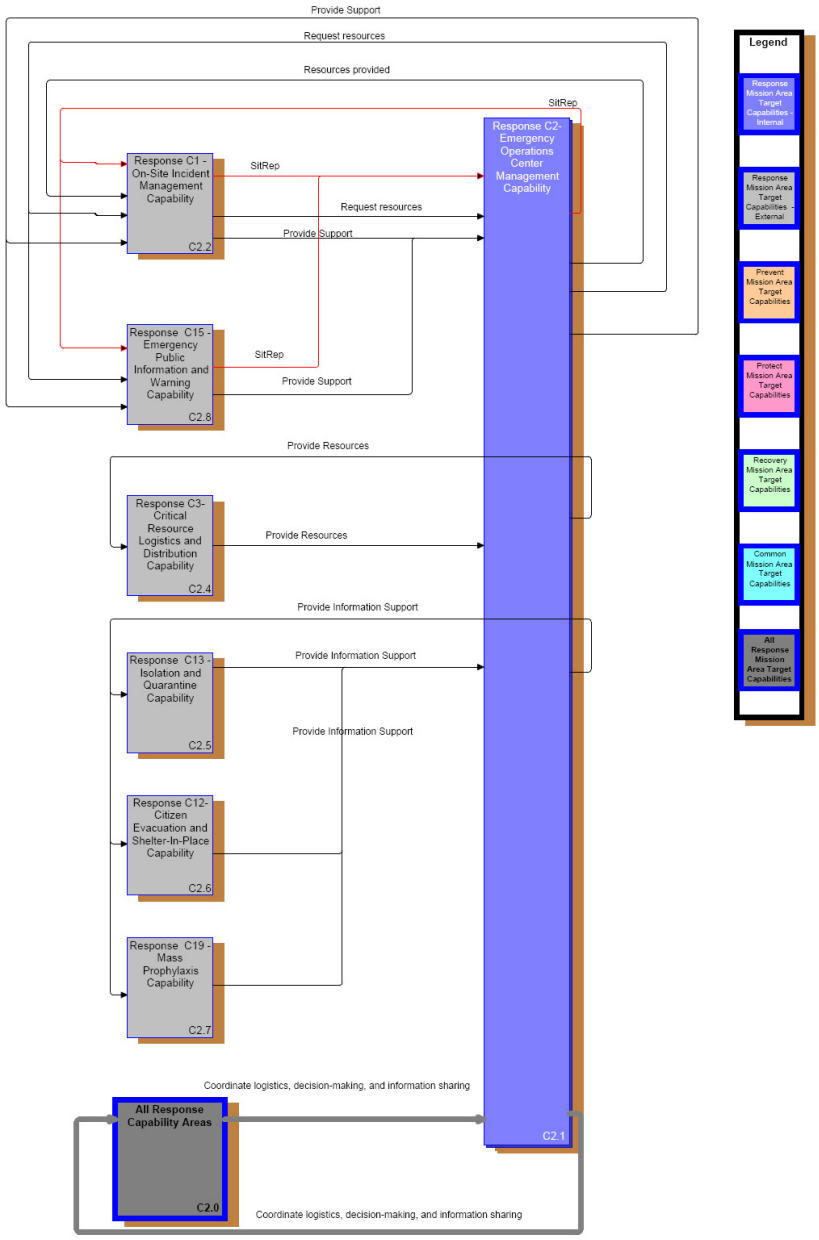
Response C2 - OV-5 Support and Coordinate Response Critical Tasks [OV-05 Node Tree]



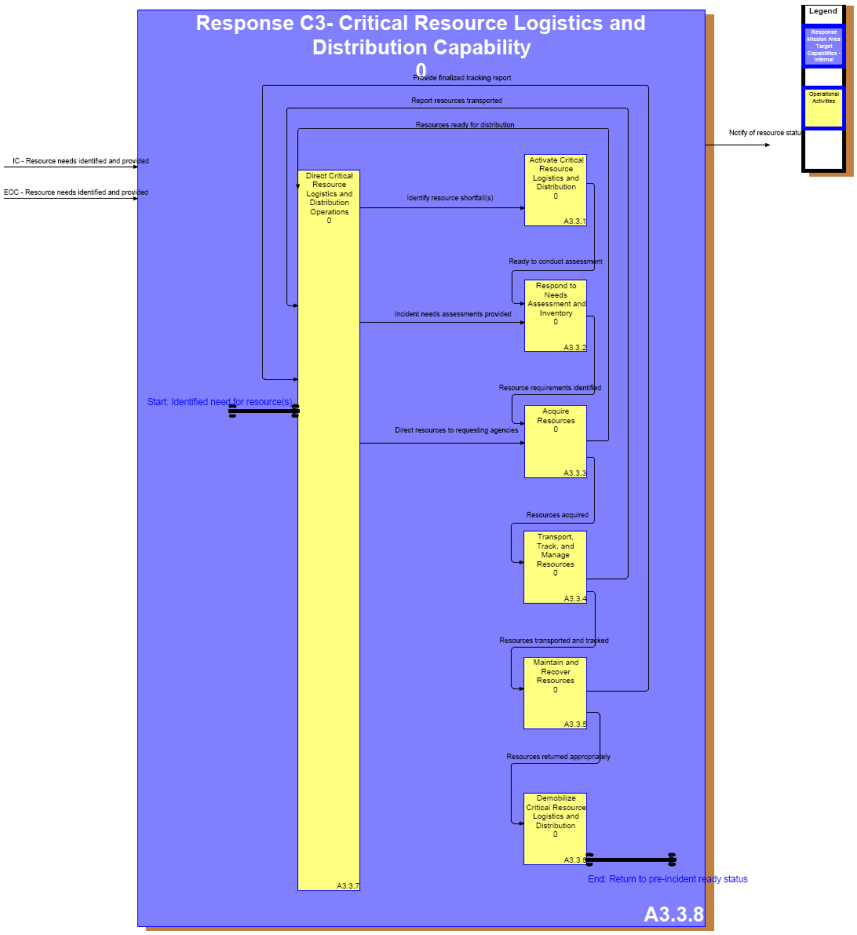
Response C2 - OV-5 Demobilize Emergency Operations Center Manag. Critical Tasks [OV-05 Node Tree]



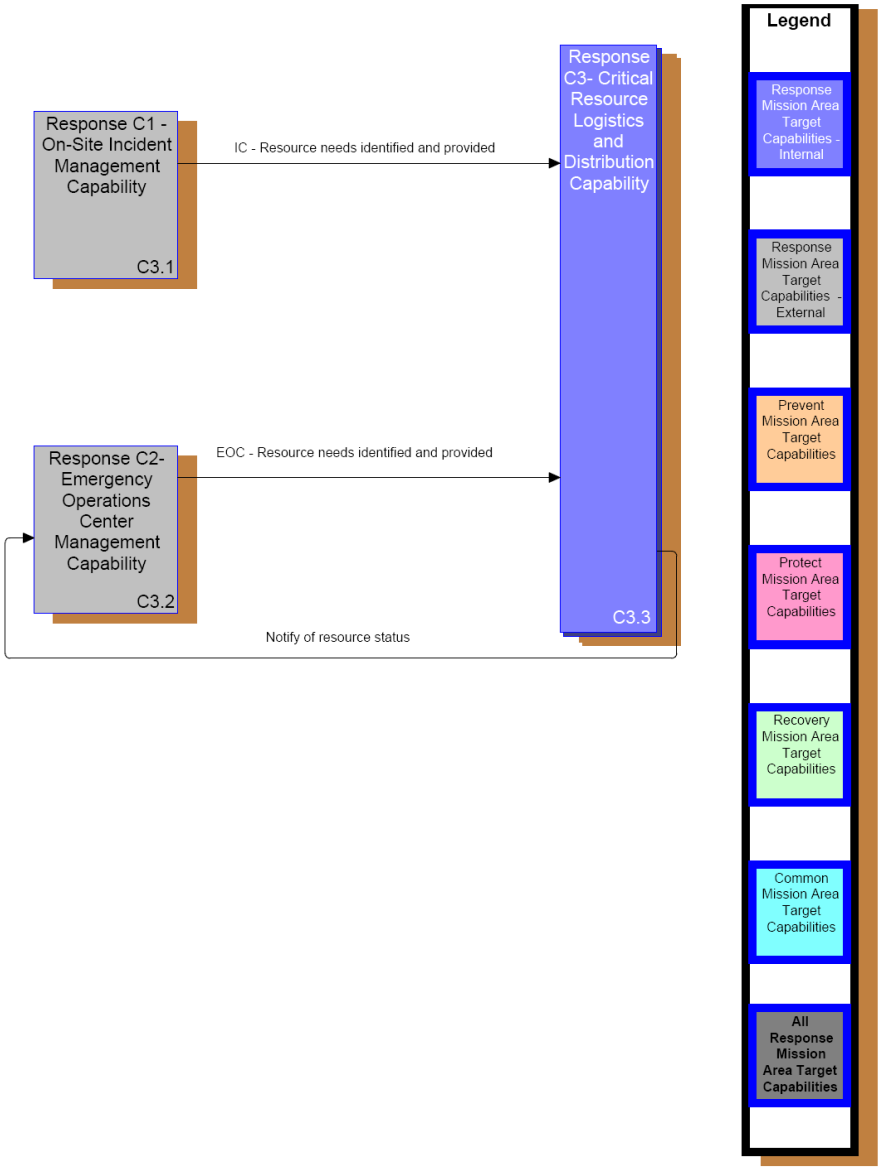
Response C2 - OV-5 - Emergency Operations Center Management Link to other Caps. [OV-05 Activity Model]



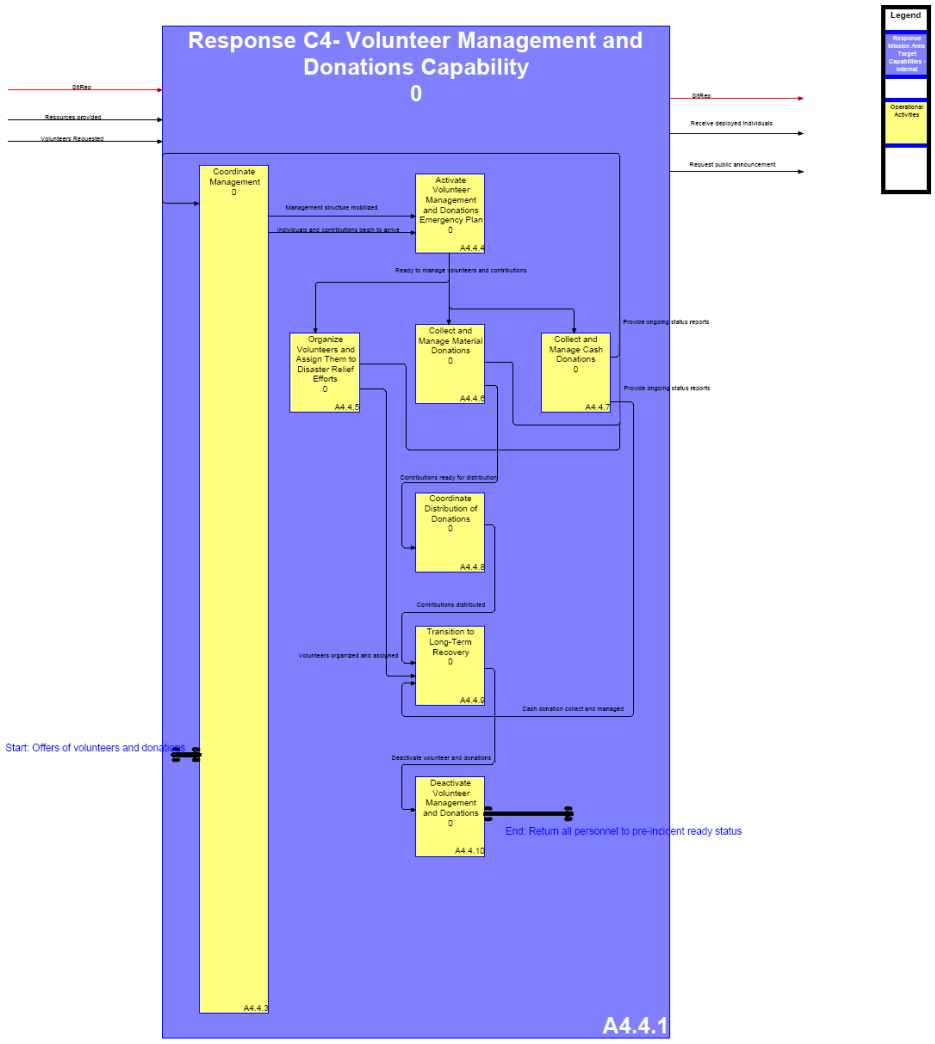
Response C3 - OV-5 - Critical Resource Logistics & Distribution(Act. Proc. Flow) [OV-05 Activity Model]



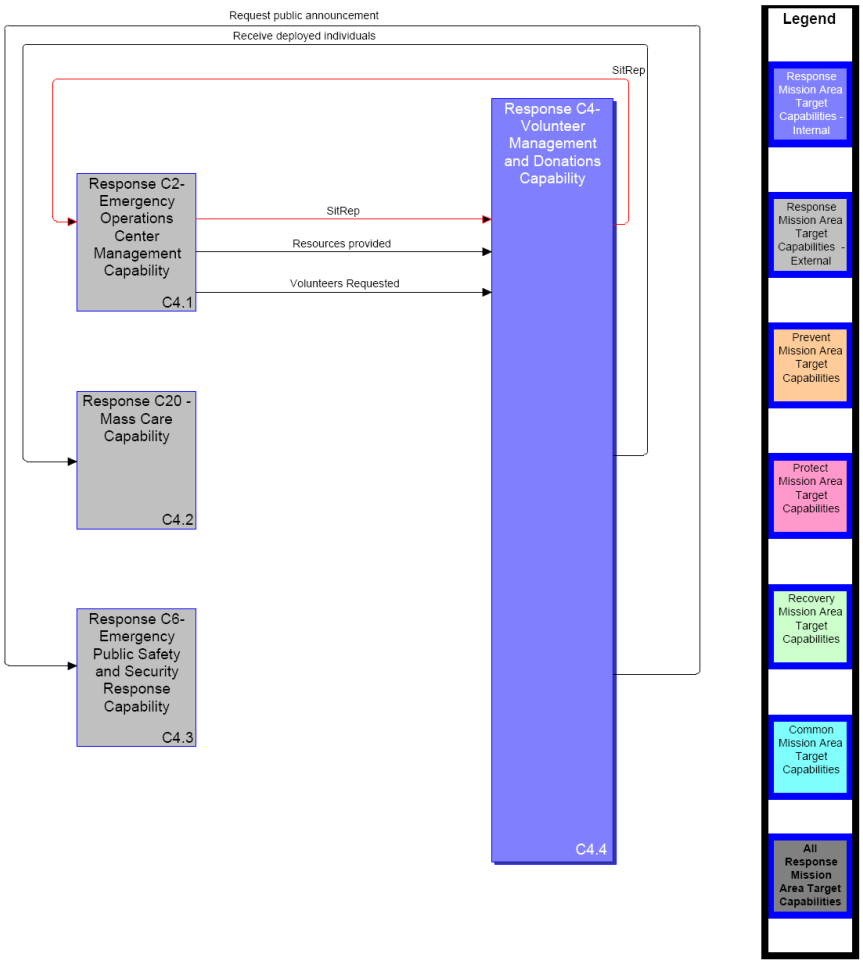
Response C3 - OV-5 - Critical Resource Logistics & Distribution Link to other Ca [OV-05 Activity Model]



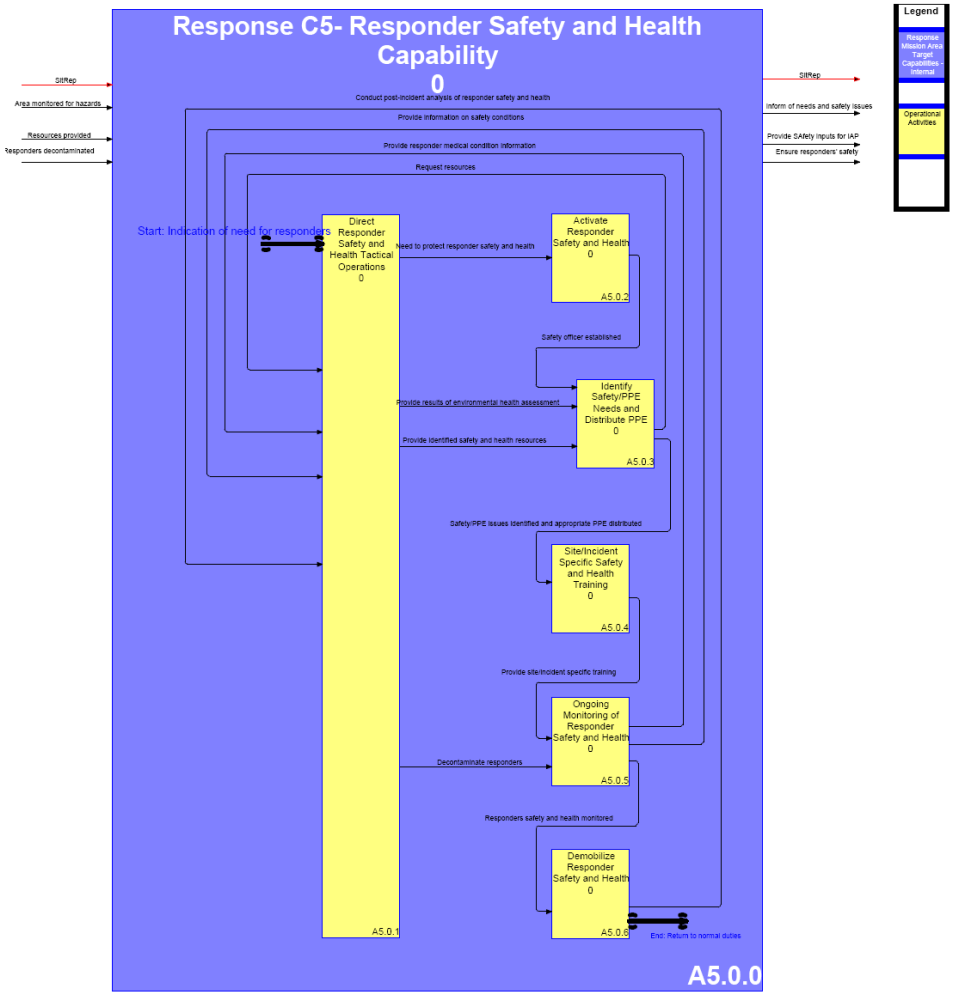
Response C4 - OV-5 - Volunteer Management and Donations (Activity Process Flow) [OV-05 Activity Model]



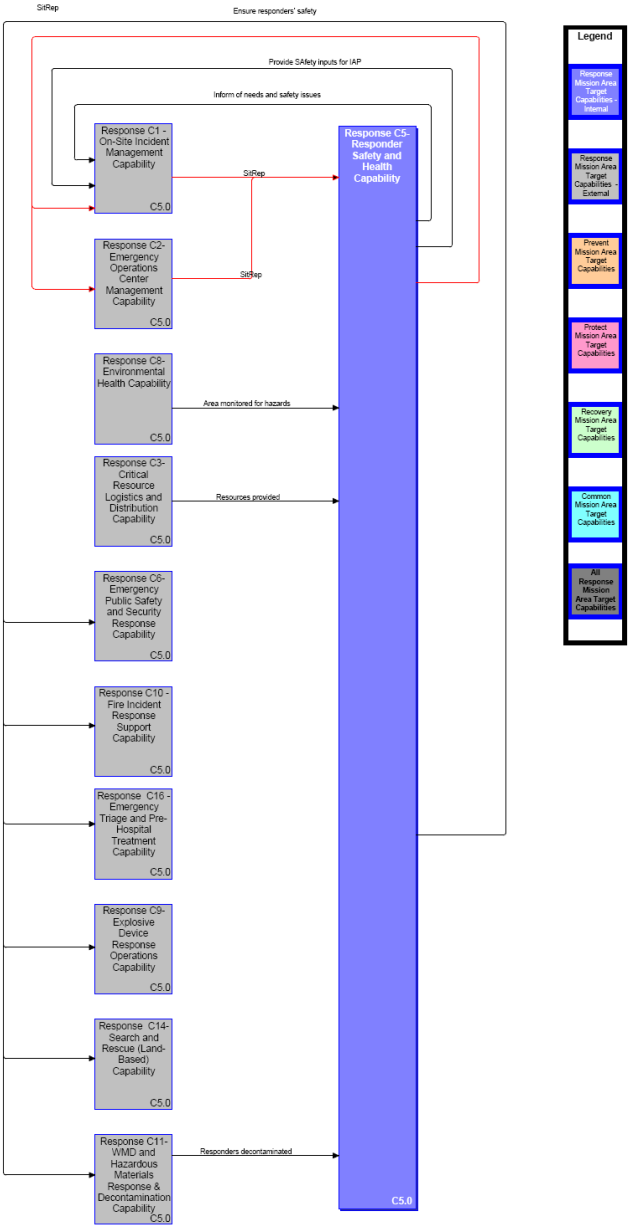
Response C4 - OV-5 -Volunteer Management & Donations Linked to ther Capabilities [OV-05 Activity Model]



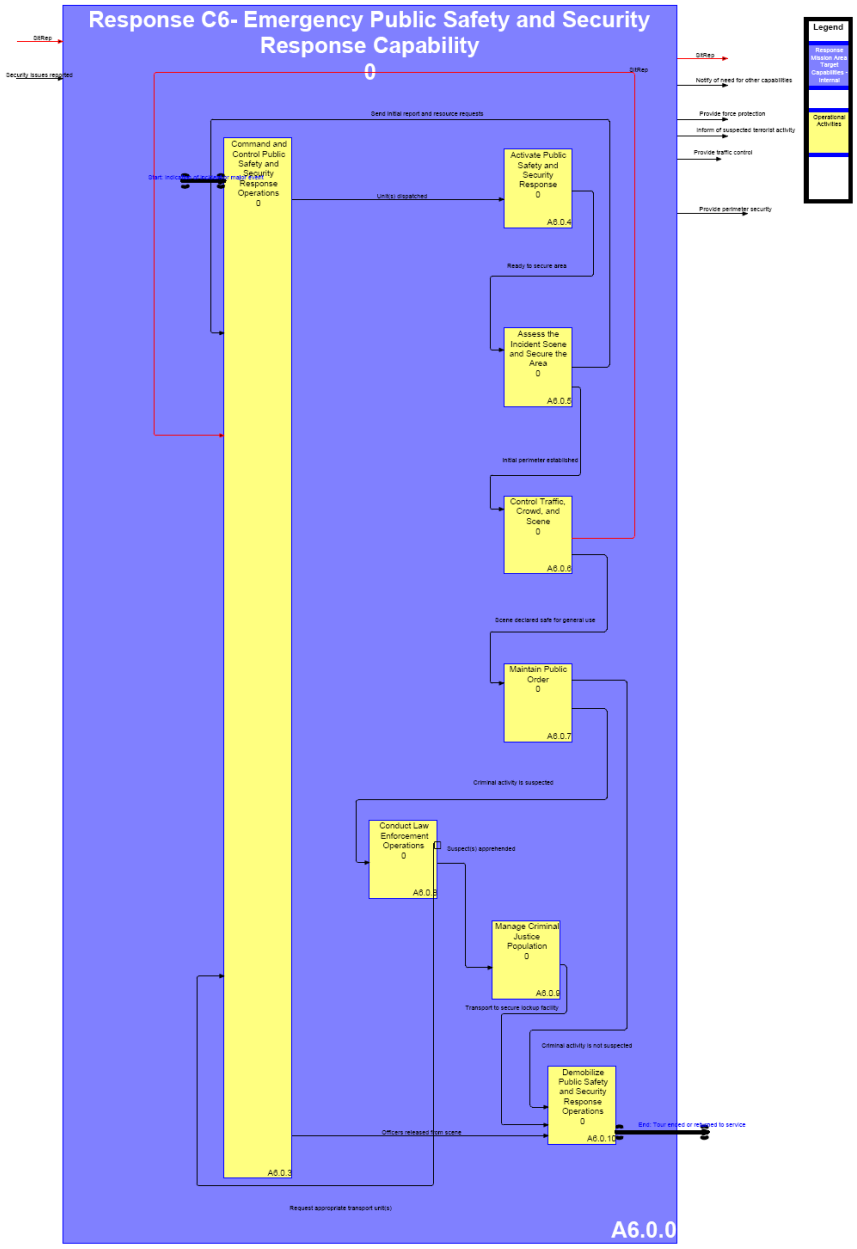
Response C5 - OV-5 - Responder Safety and Health (Activity Work Flow) [OV-05 Activity Model]



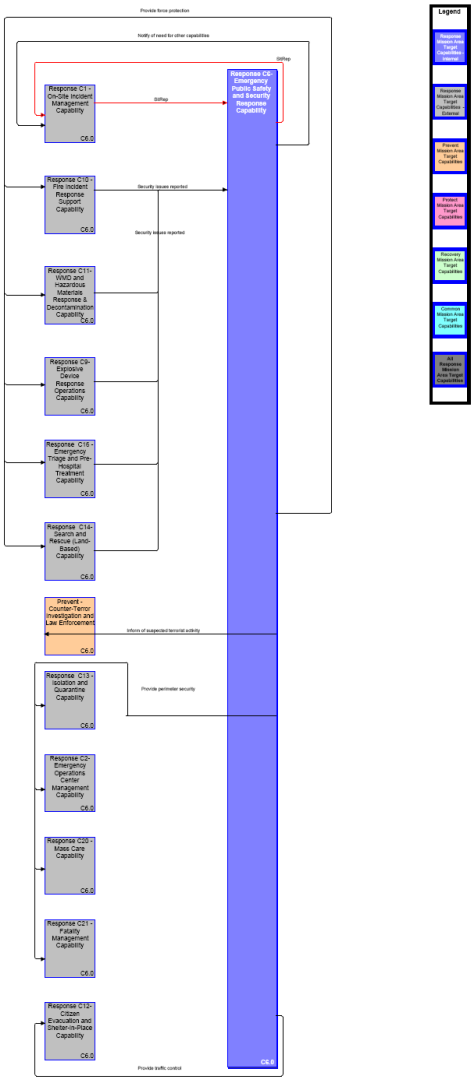
Response C5 - OV-5 - Responder Safety & Health Capability Link to other Caps. [OV-05 Activity Model]



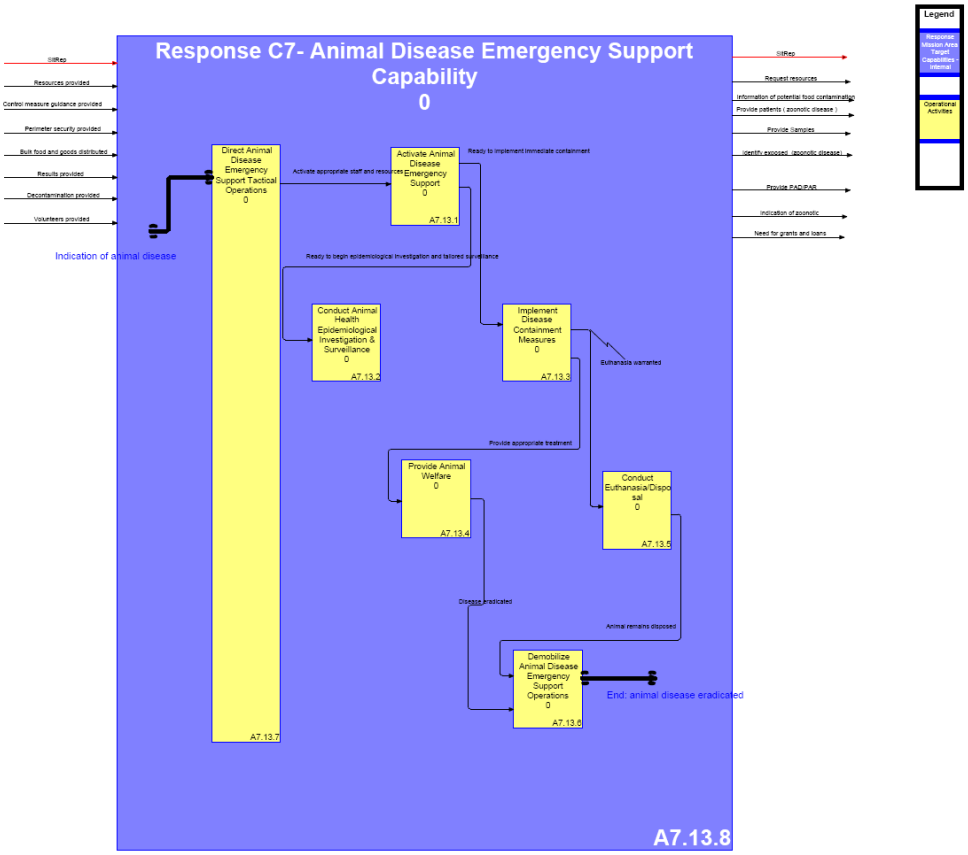
Response C6 - OV-5 - Emergency Public Safety & Security (Act. Process Flow) [OV-05 Activity Model]



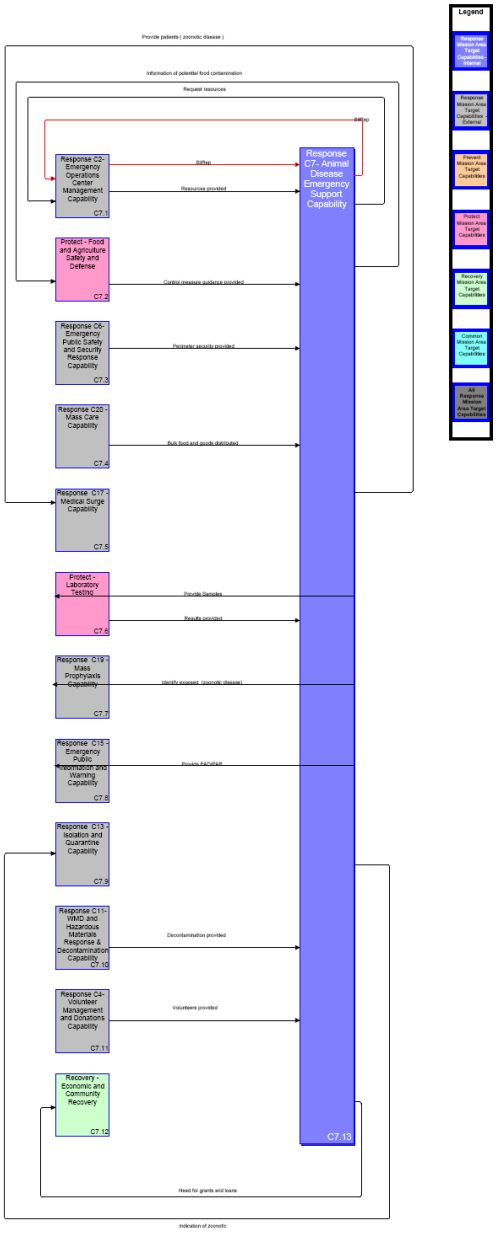
Response C6 - OV-5 - Emergency Public Safety & Security Response Link to other C [OV-05 Activity Model]



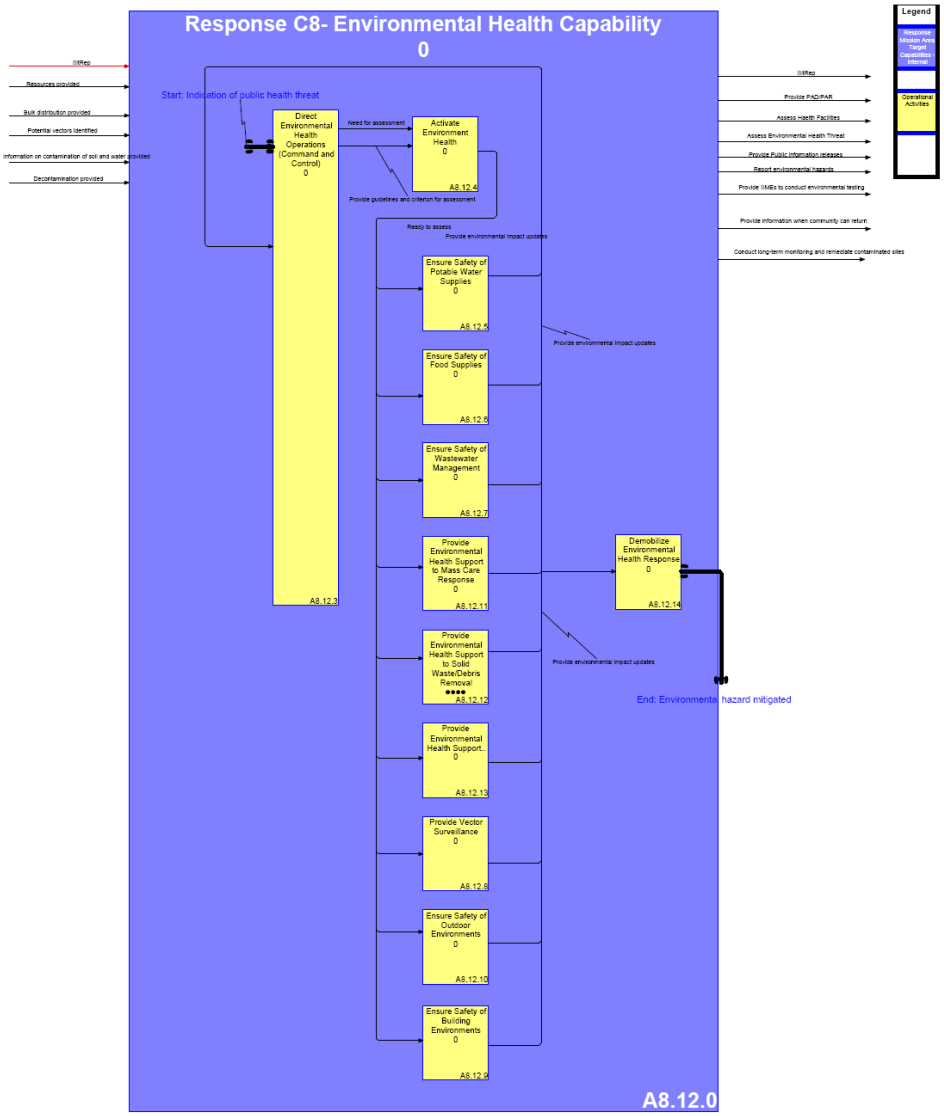
Response C7 - OV-5 - Animal Disease Emergency Support (Activity Process Flow) [OV-05 Activity Model]



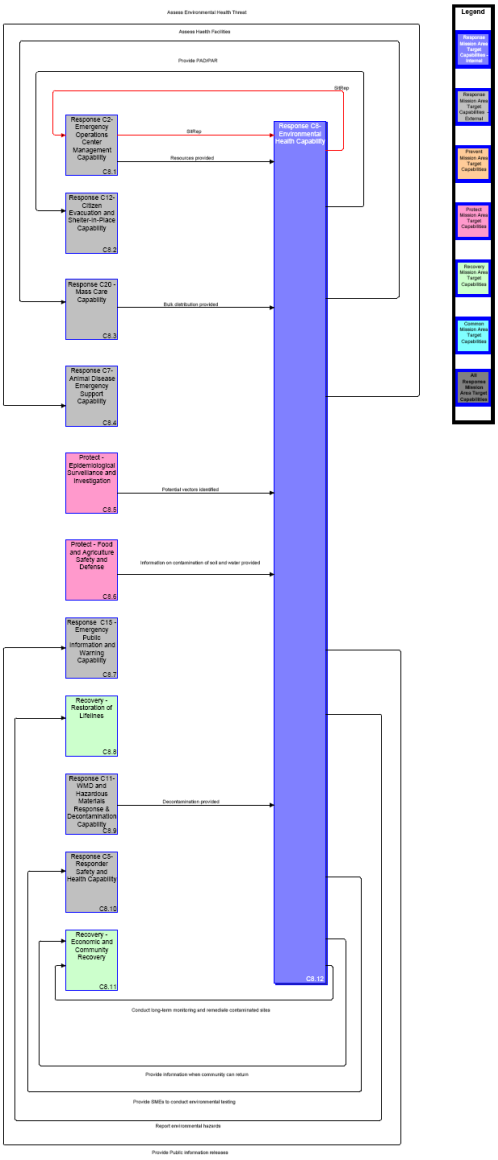
Response C7 - OV-5 - Animal Disease Emergency Support Link to Other Capabilities [OV-05 Activity Model]



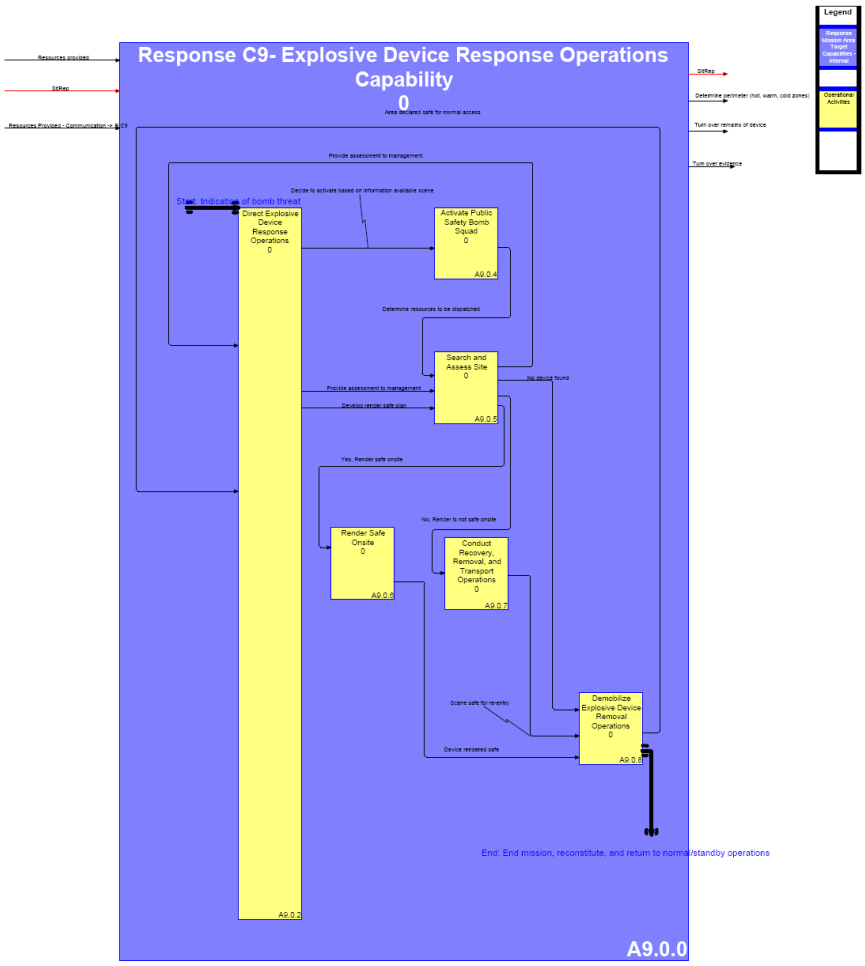
Response C8 - OV-5 - Environmental Health Capability (Activity Process Flow) [OV-05 Activity Model]



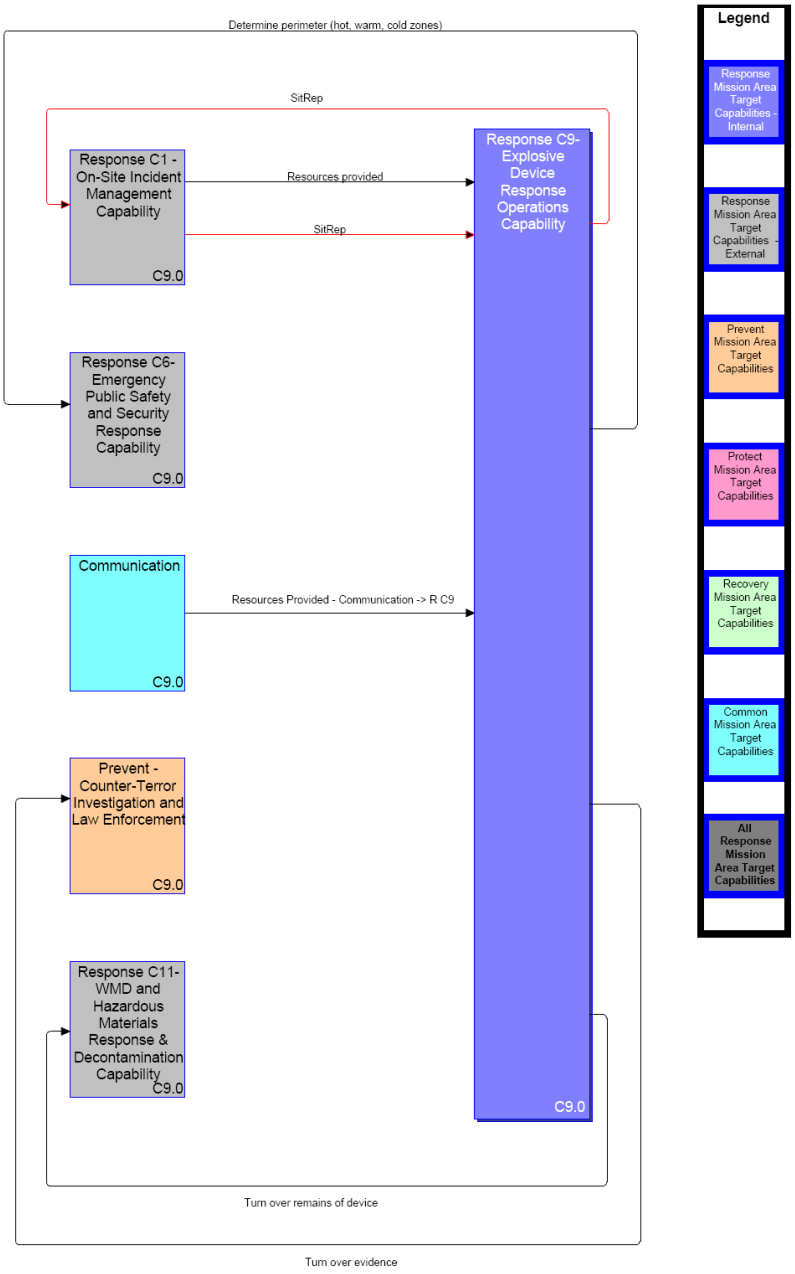
Response C8 - OV-5 - Environmental Health Link to Other Capabilities [OV-05 Activity Model]



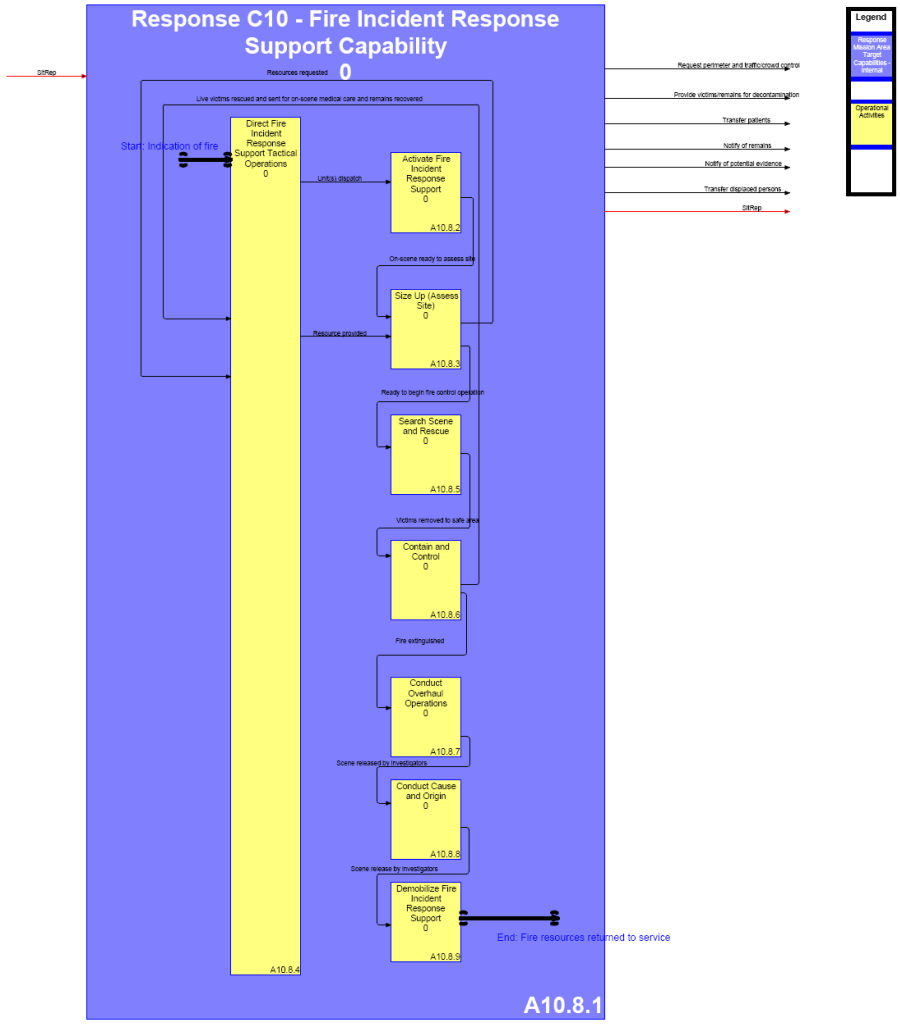
Response C9 - OV-5 - Explosive Device Response Ops (Activity Flow Process) [OV-05 Activity Model]



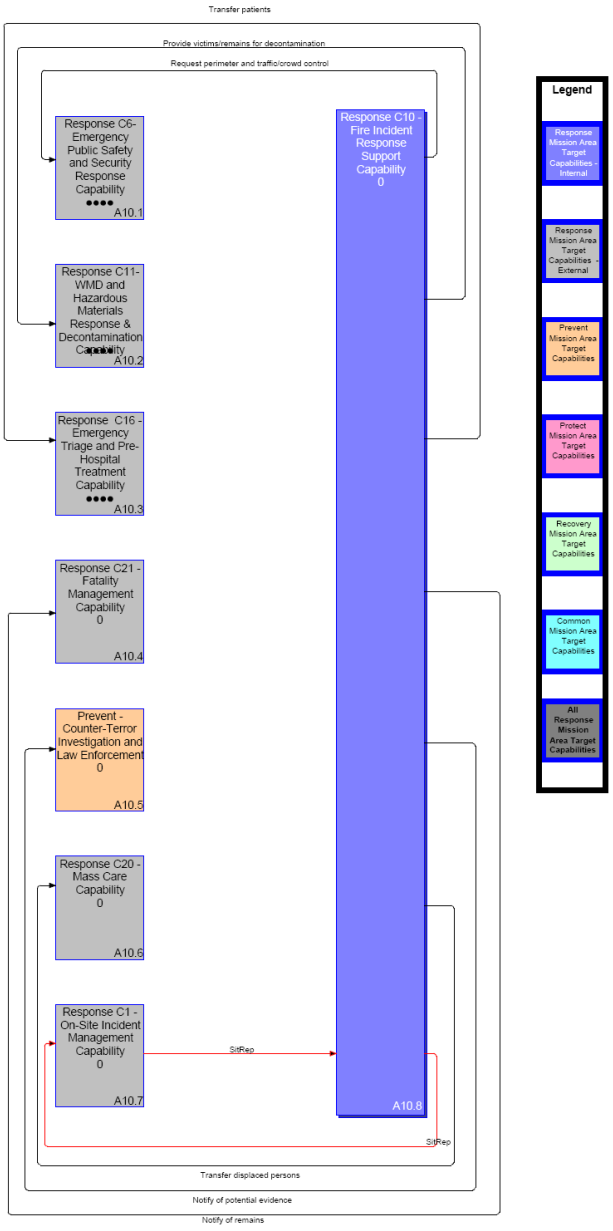
Response C9 - OV-5 - Explosive Device Response Operations Link to other Caps [OV-05 Activity Model]



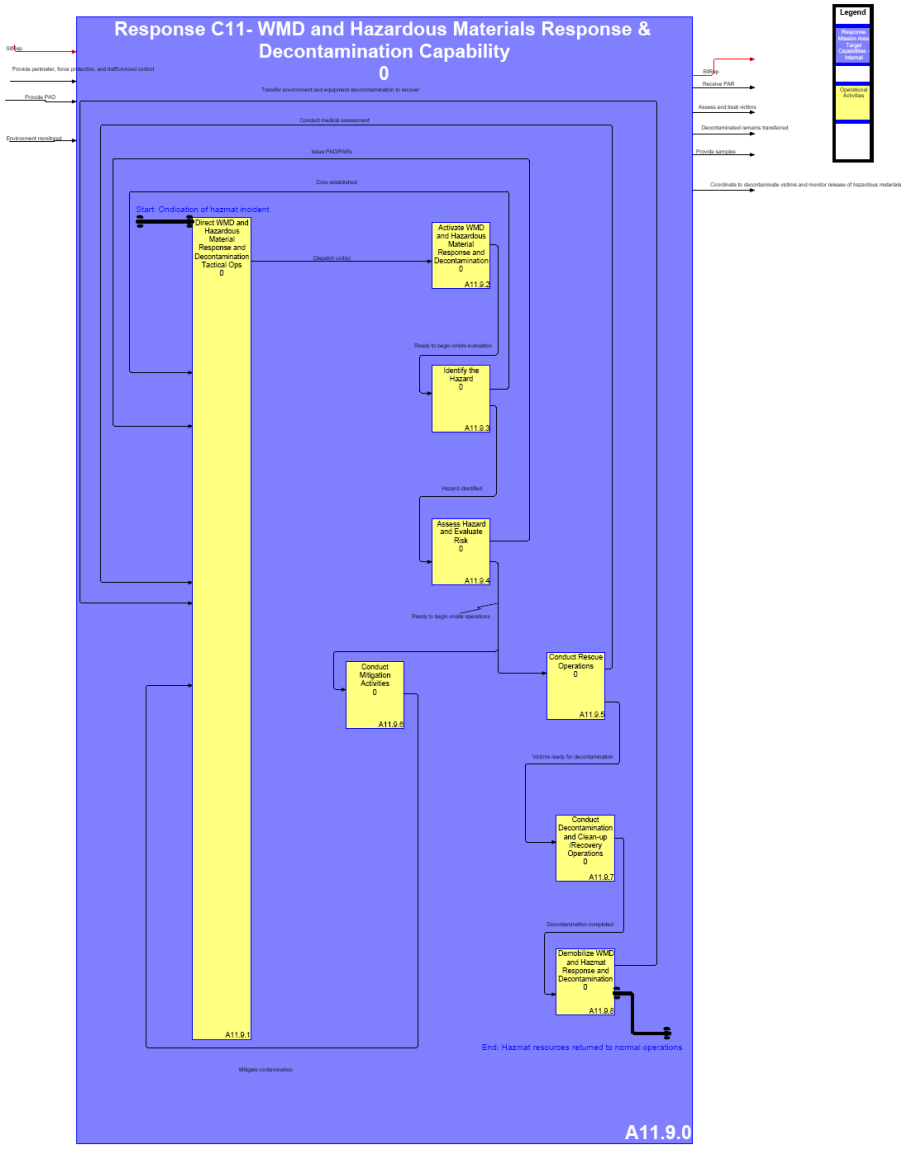
Response C10 - OV-5 - Fire Incident Response Support (Activity Process Flow) [OV-05 Activity Model]



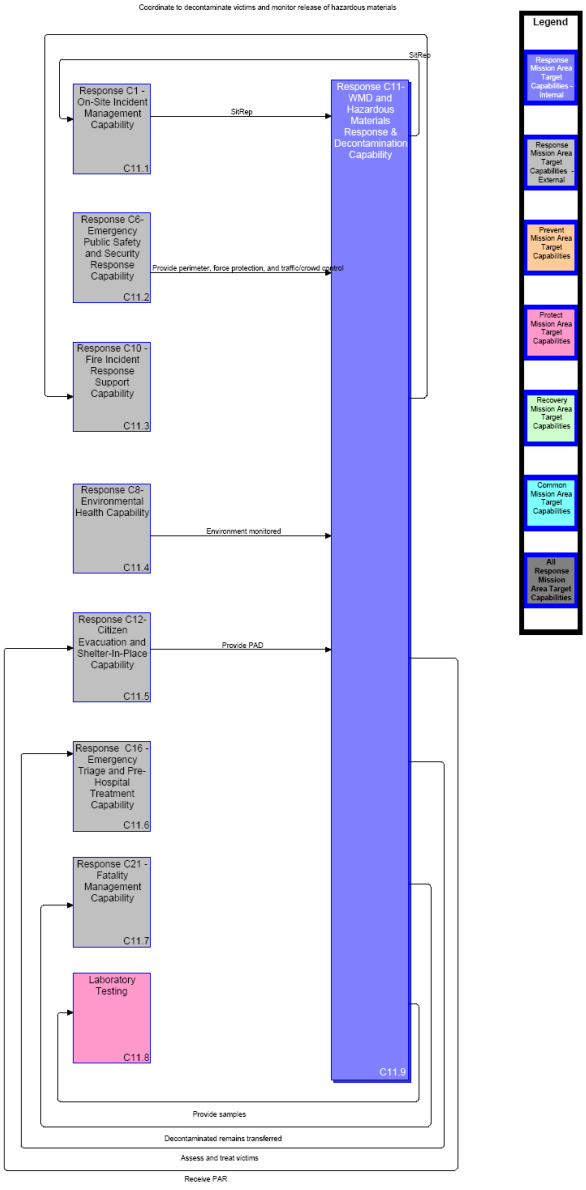
Response C10 - OV-5 - Fire Incident Response Support Link to Other Capasbilities [OV-05 Activity Model]



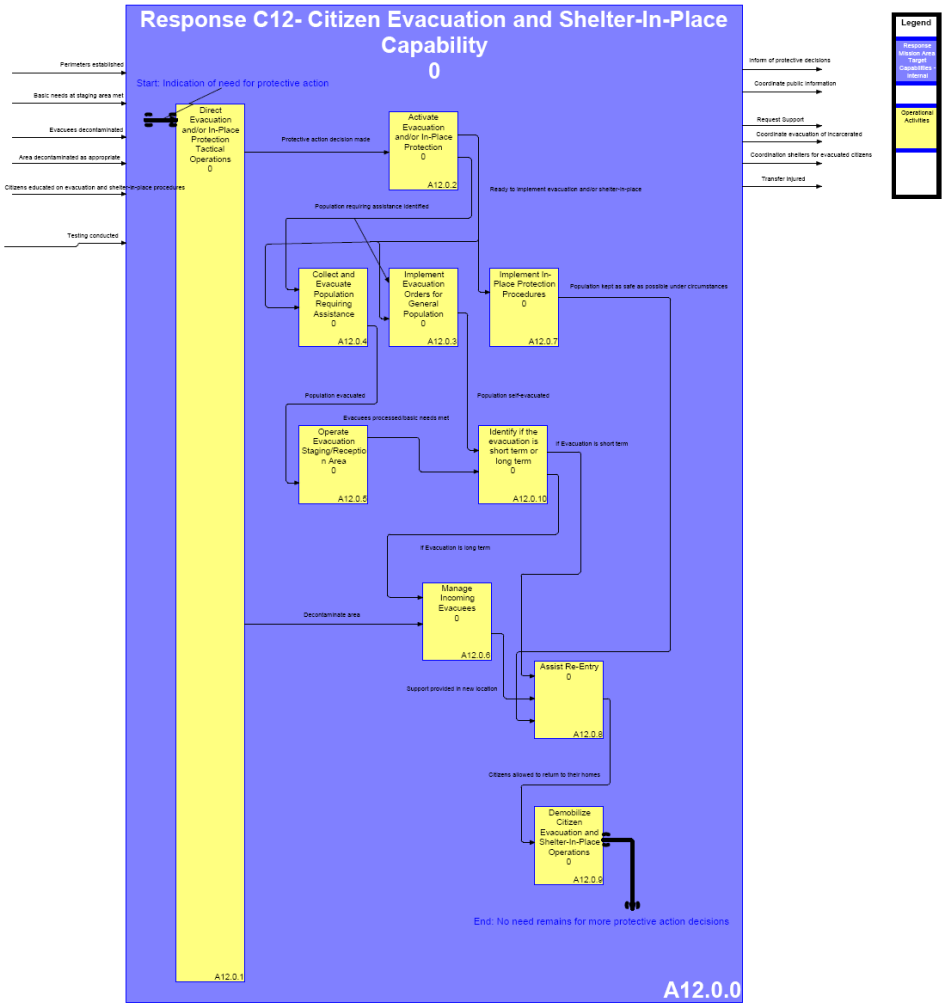
Response C11 - OV-5 - WMD and Hazardous Materials (Activity Process Flow) [OV-05 Activity Model]



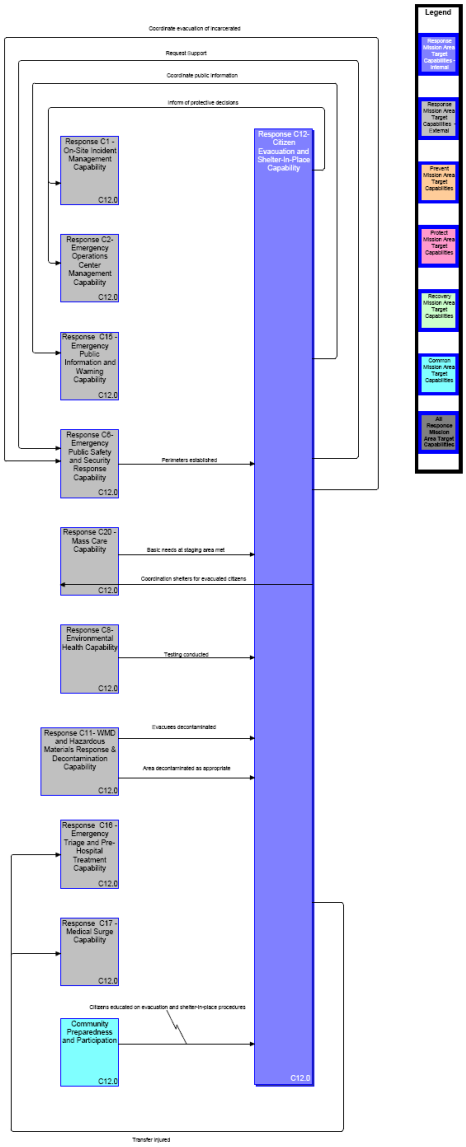
Response C11 - OV-5 - WMD and Hazardous Materials Response Link to Other Cap [OV-05 Activity Model]



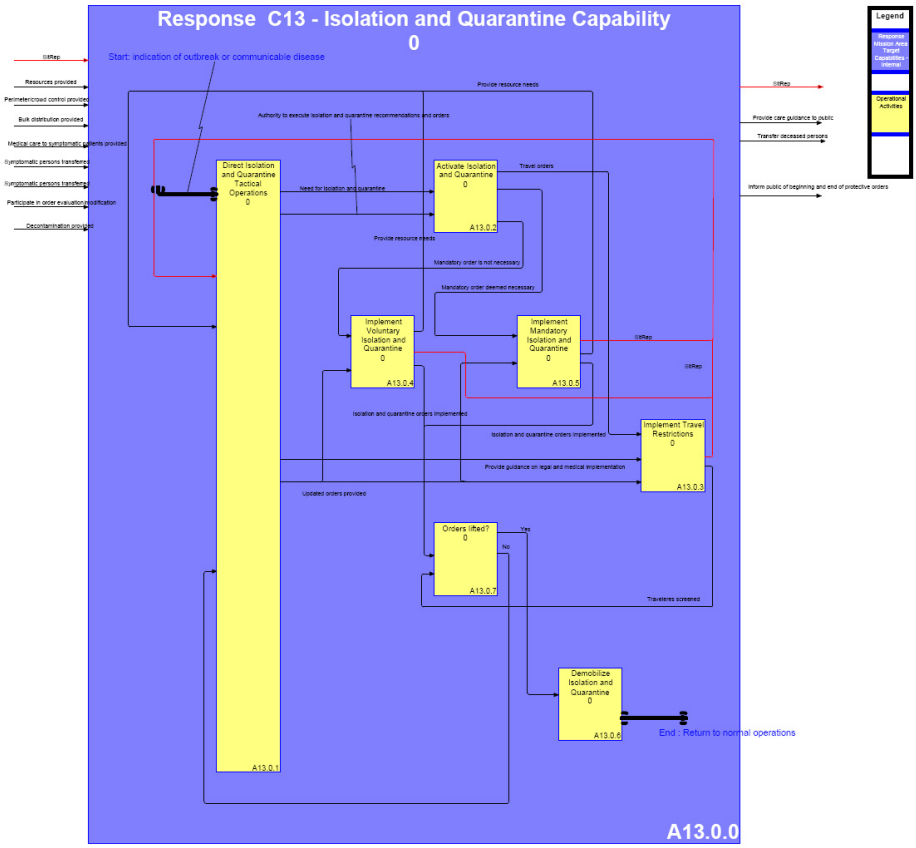
Response C12 - OV-5 - Citizen Evacuation and Shelter (Activity Process Flow) [OV-05 Activity Model]



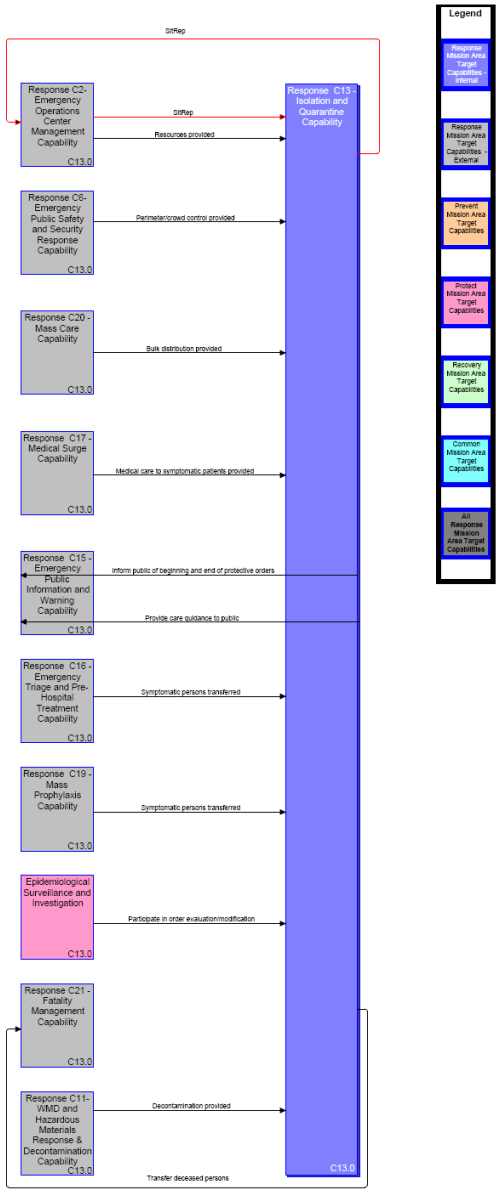
Response C12 - OV-5 - Citizen Evacuation and Shelter-In-Place Link to Other Cap [OV-05 Activity Model]



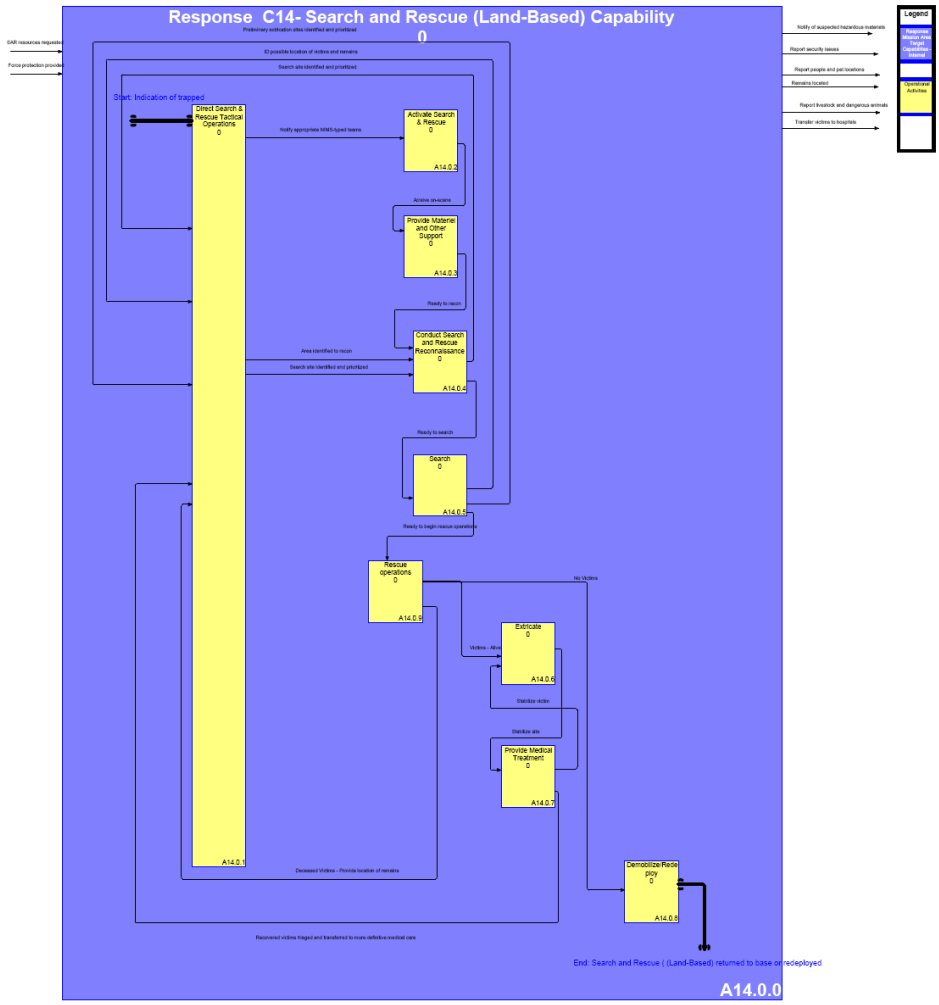
Response C13 - OV-5 - Isolation and Quarantine (Activity Process Flow) [OV-05 Activity Model]



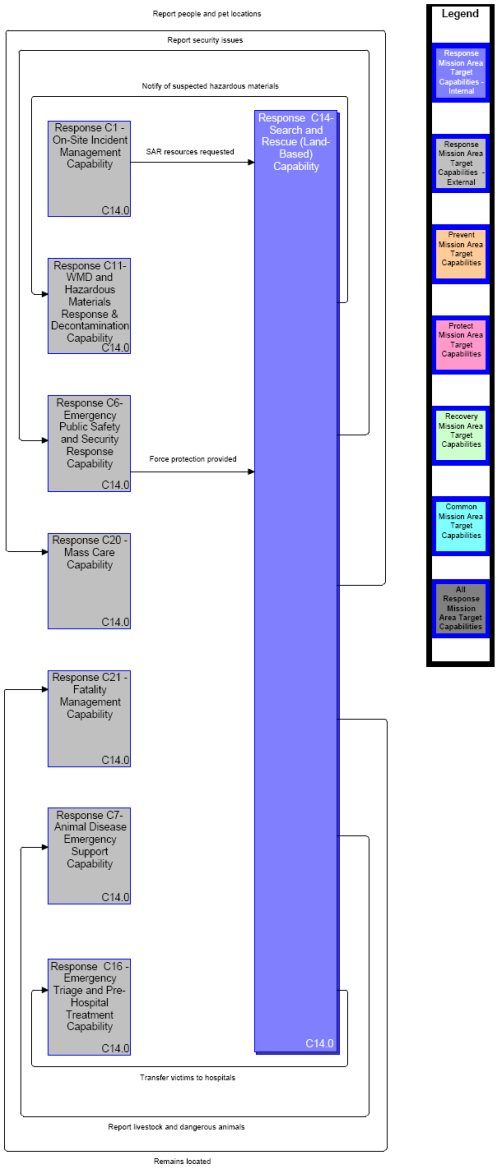
Response C13 - OV-5 - Isolation and Quarantine Link to Other Capabilities [OV-05 Activity Model]



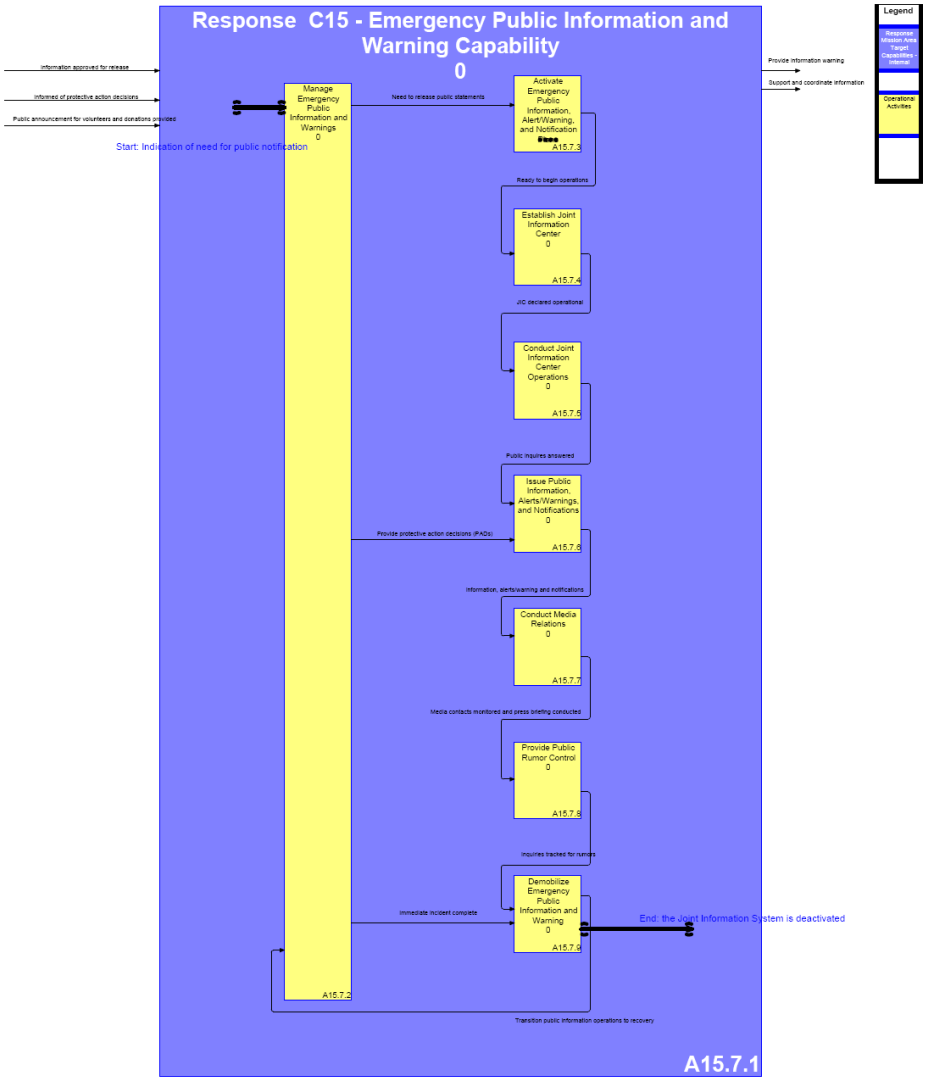
Response C14 - OV-5 - Search and Rescue (Land-Based) (Activity Process Flow) [OV-05 Activity Model]



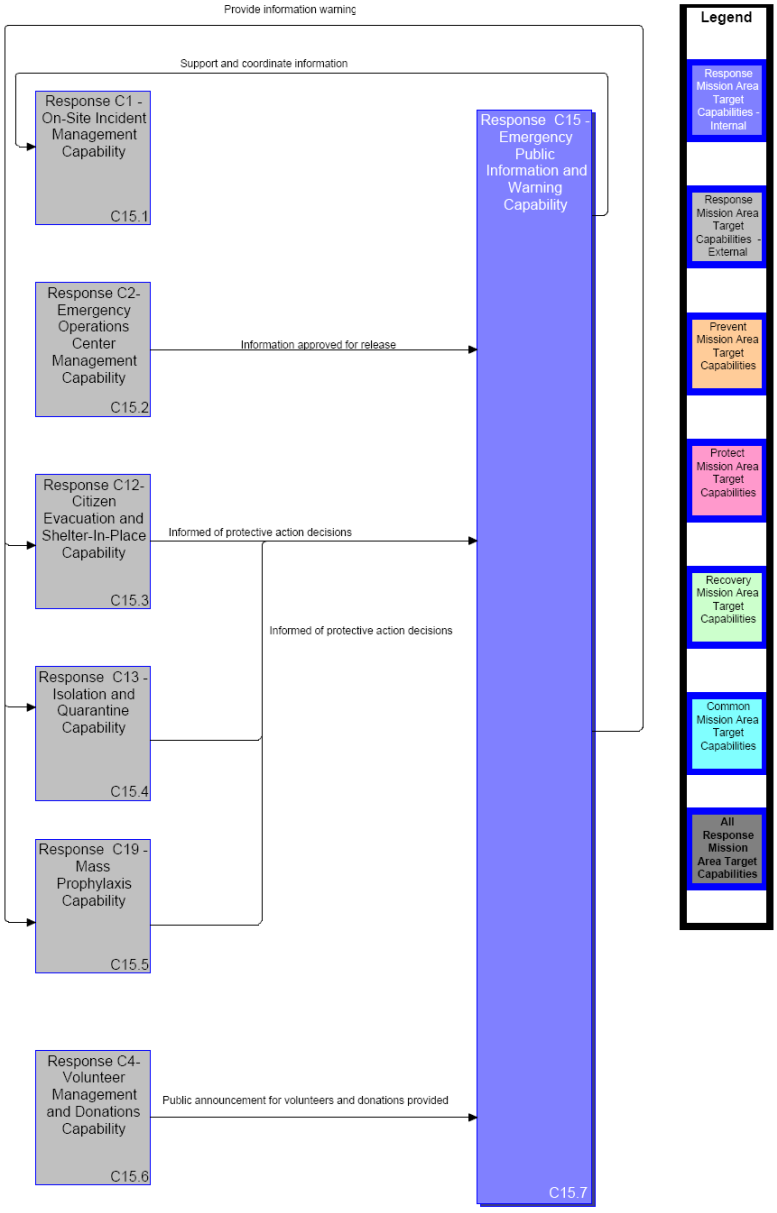
Response C14 - OV-5 - Search and Rescue (Land-Based) Link to Other Capabilities [OV-05 Activity Model]



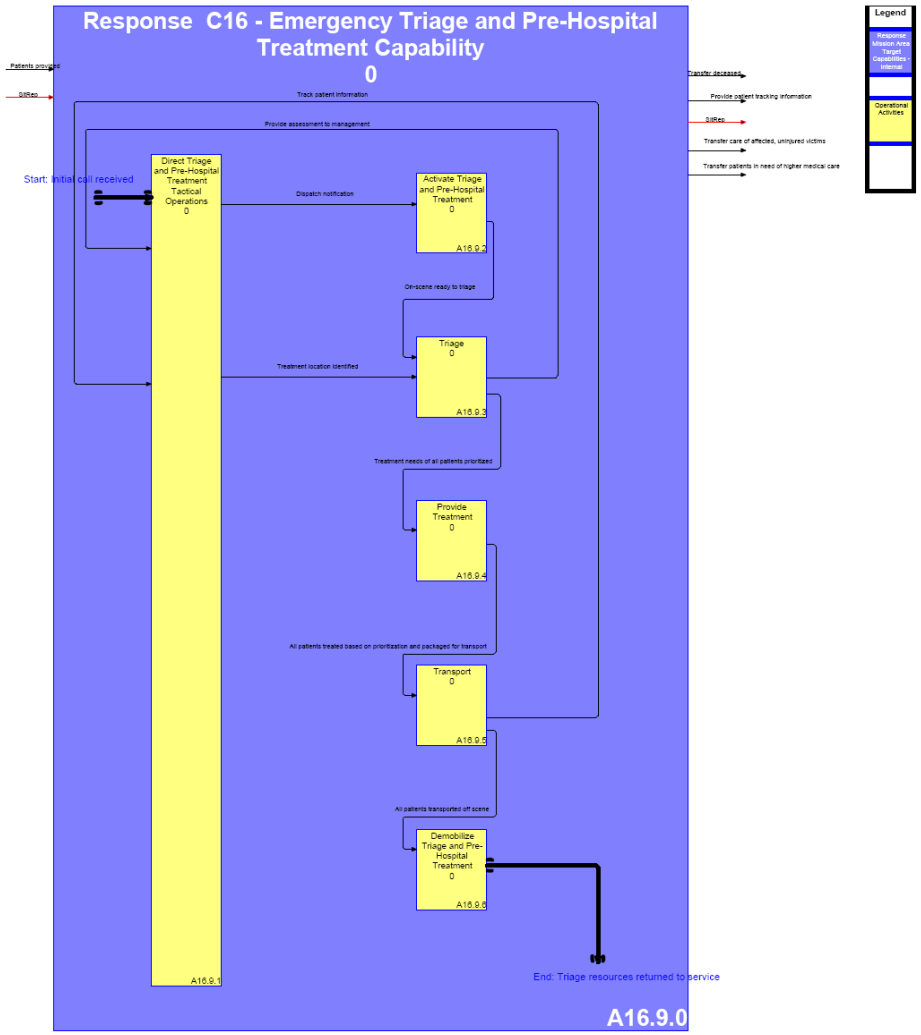
Response C15 - OV-5 - Emergency Public Information & Warning (Act. Process Flow) [OV-05 Activity Model]



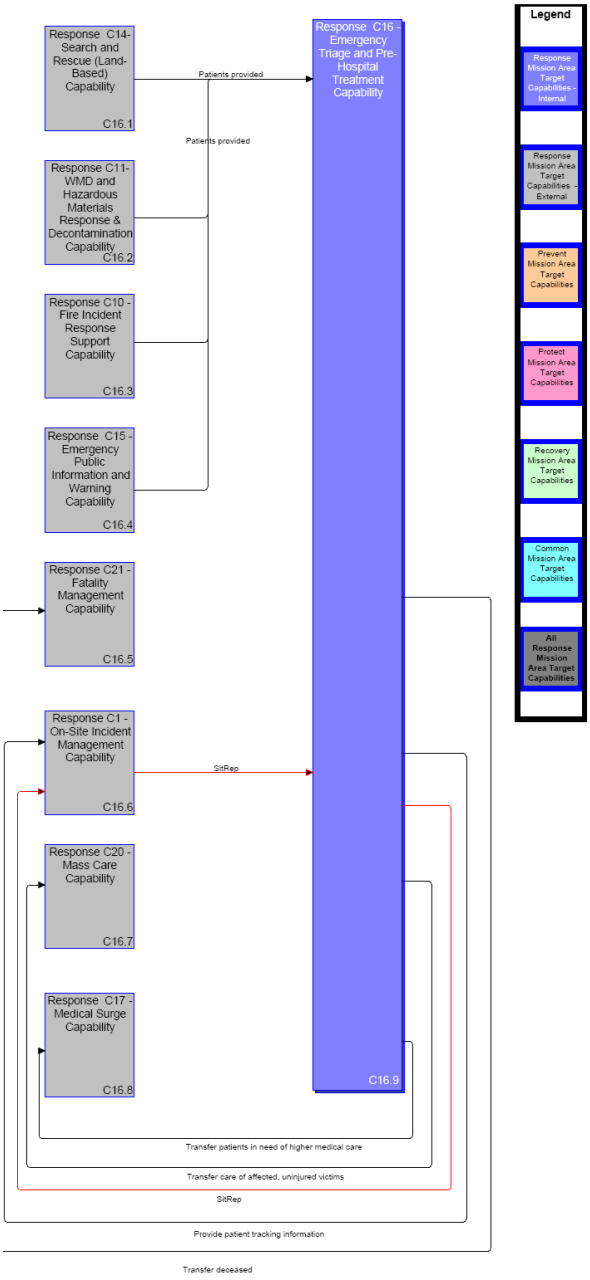
Response C15 - OV-5 - Emergency Public Information Link to Other Capabilities [OV-05 Activity Model]



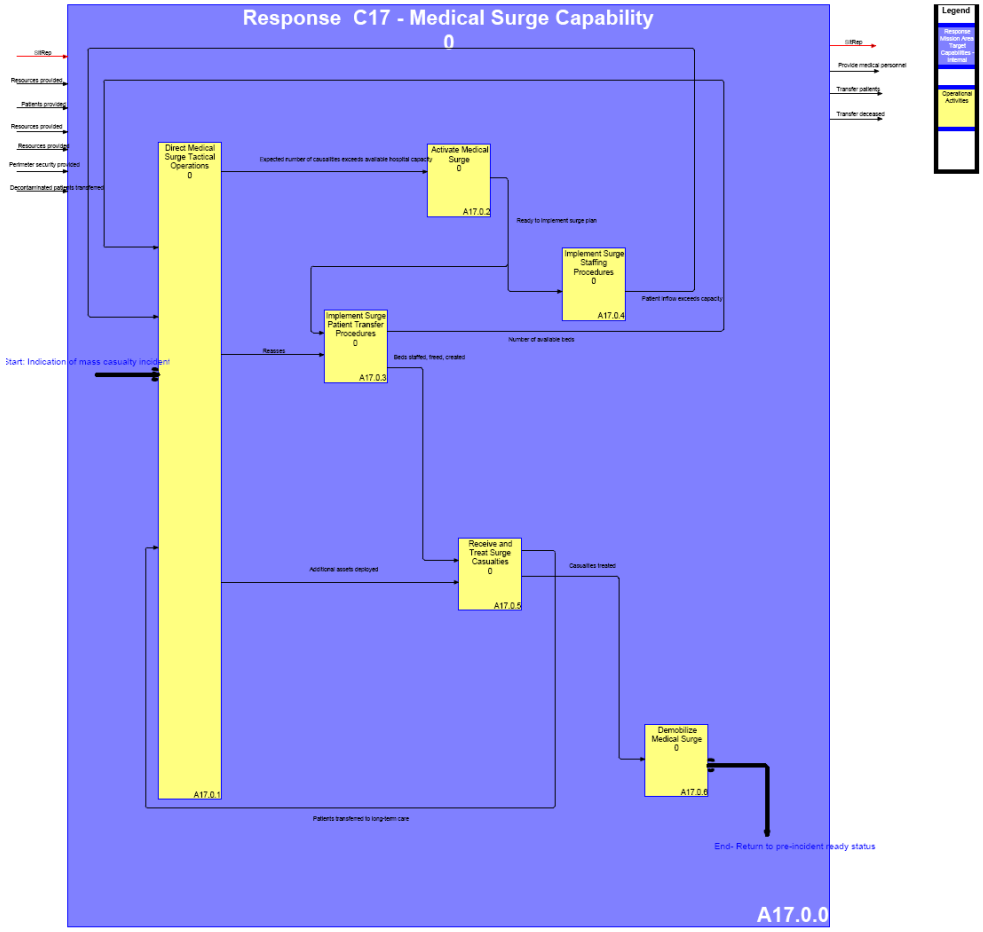
Response C16 - OV-5 -Emergency Triage and Pre-Hospital Treatment(Act. Proc. F) [OV-05 Activity Model]



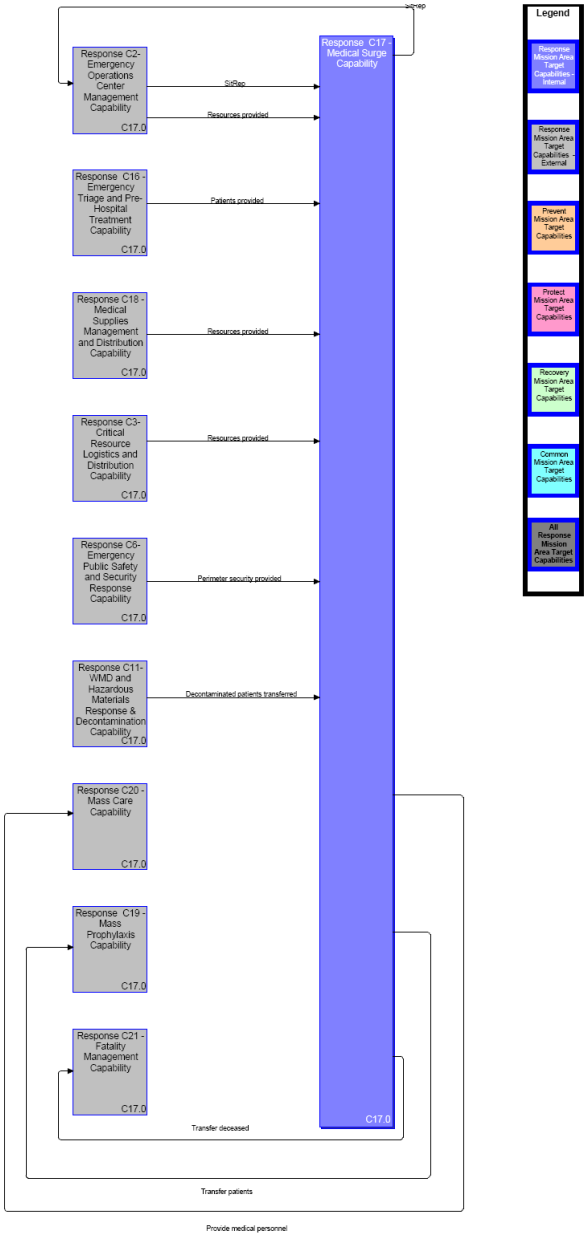
Response C16 - OV-5 - Emergency Triage Treatment Link to Other Capabilities [OV-05 Activity Model]



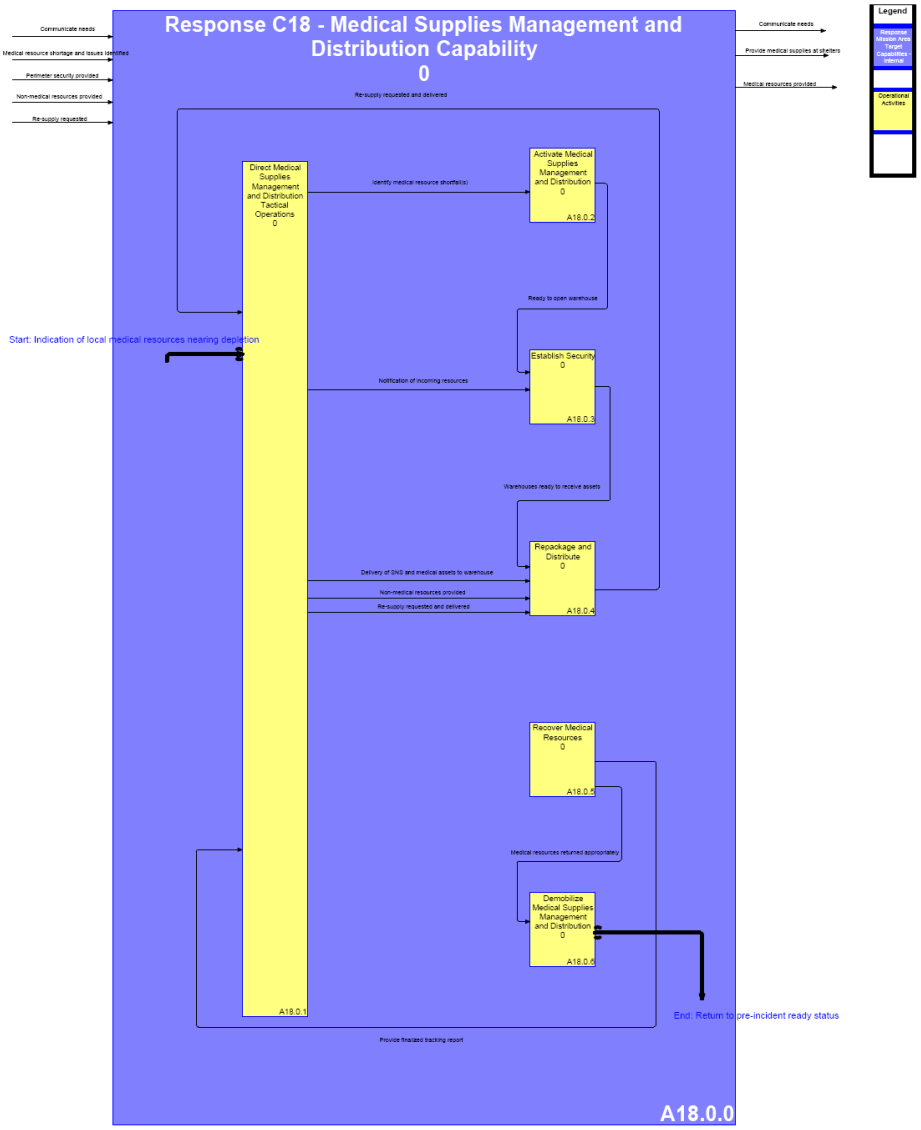
Response C17 - OV-5 - Medical Surge (Activity Process Flow) [OV-05 Activity Model]



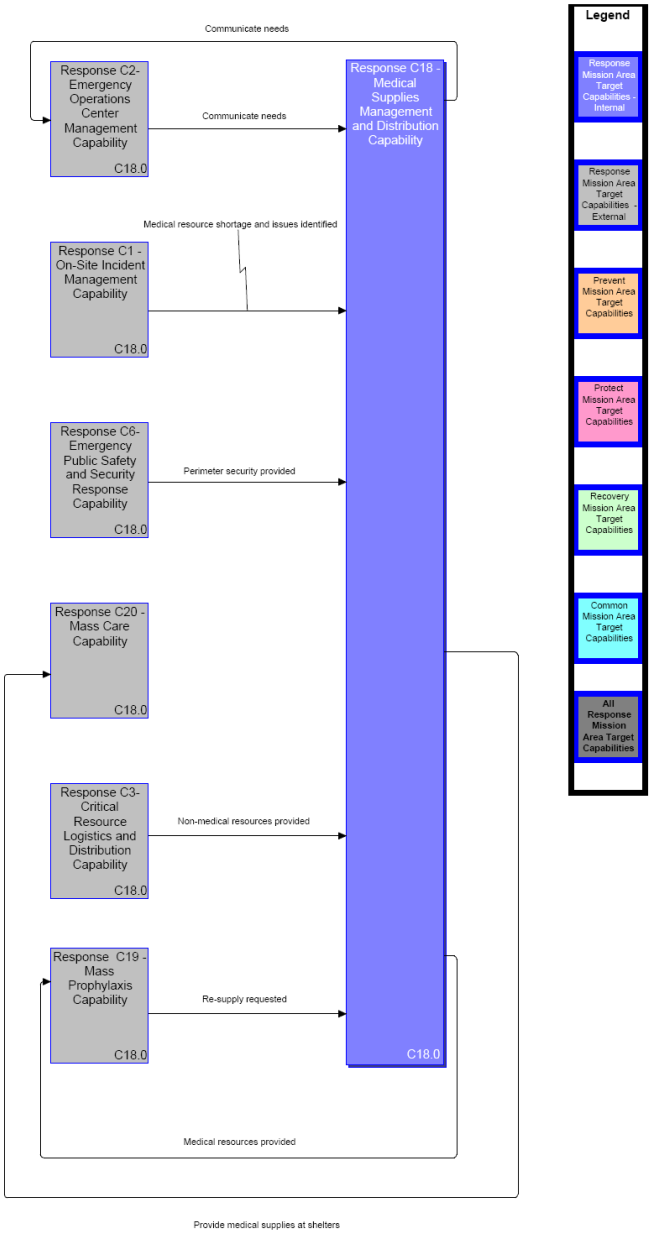
Response C17 - OV-5 - Medical Surge Link to Other Capabilities [OV-05 Activity Model]



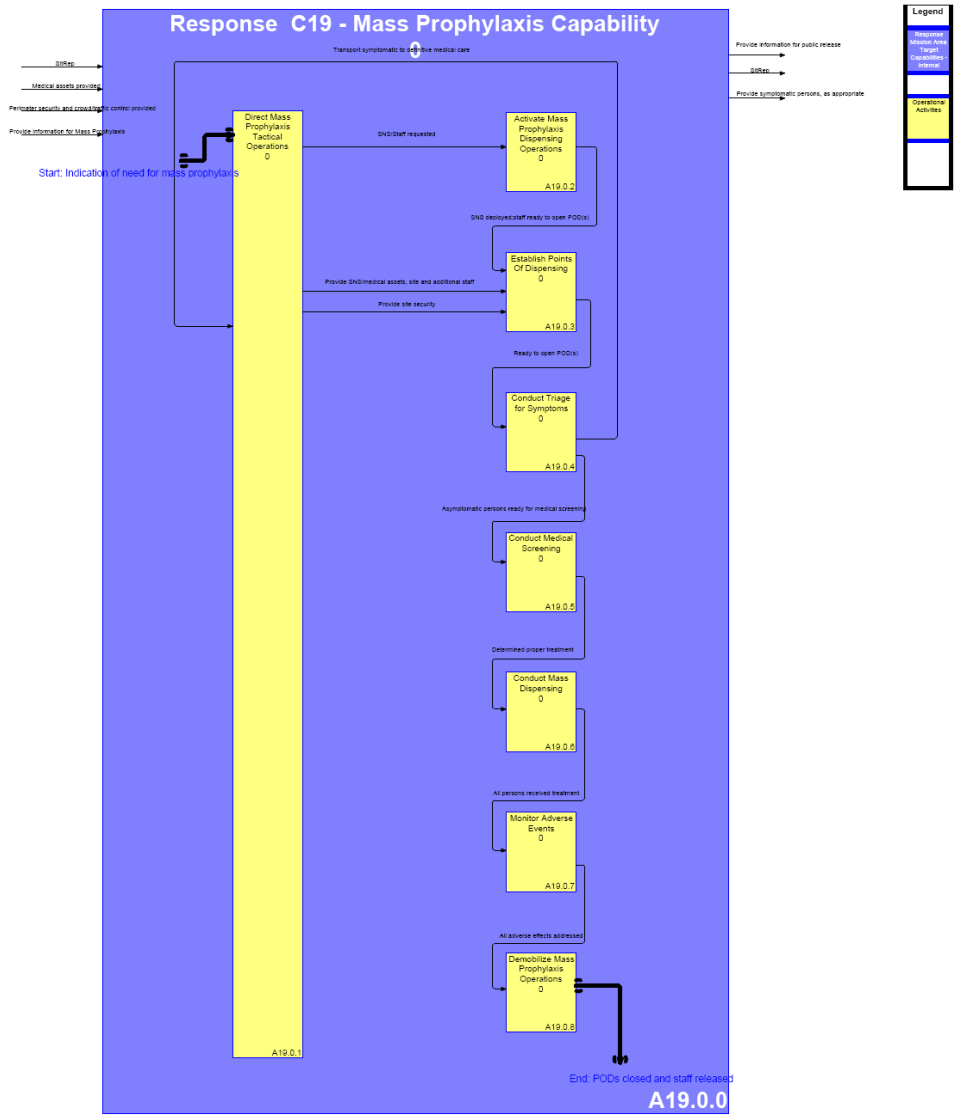
Response C18 - OV-5 - Medical Supplies (Activity Process Flow) [OV-05 Activity Model]



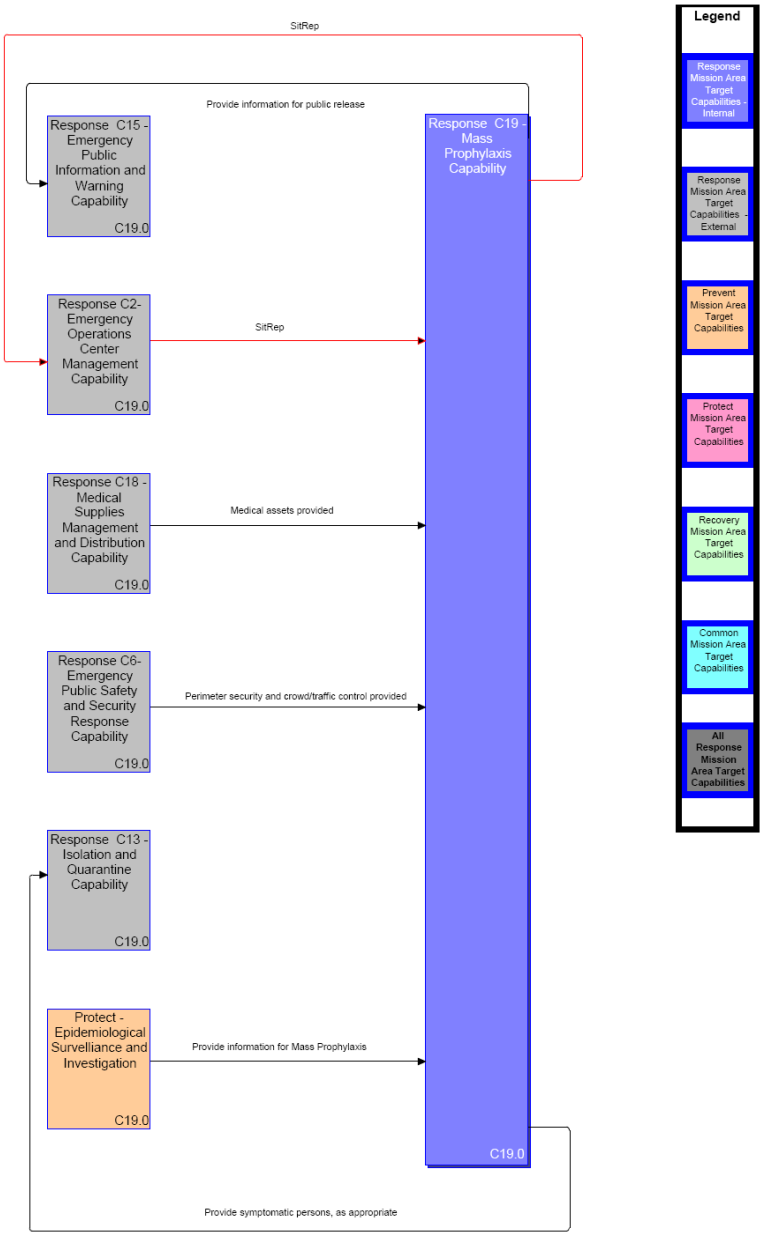
Response C18 - OV-5 - Med. Supplies Managment & Distribution Link to other Cap. [OV-05 Activity Model]



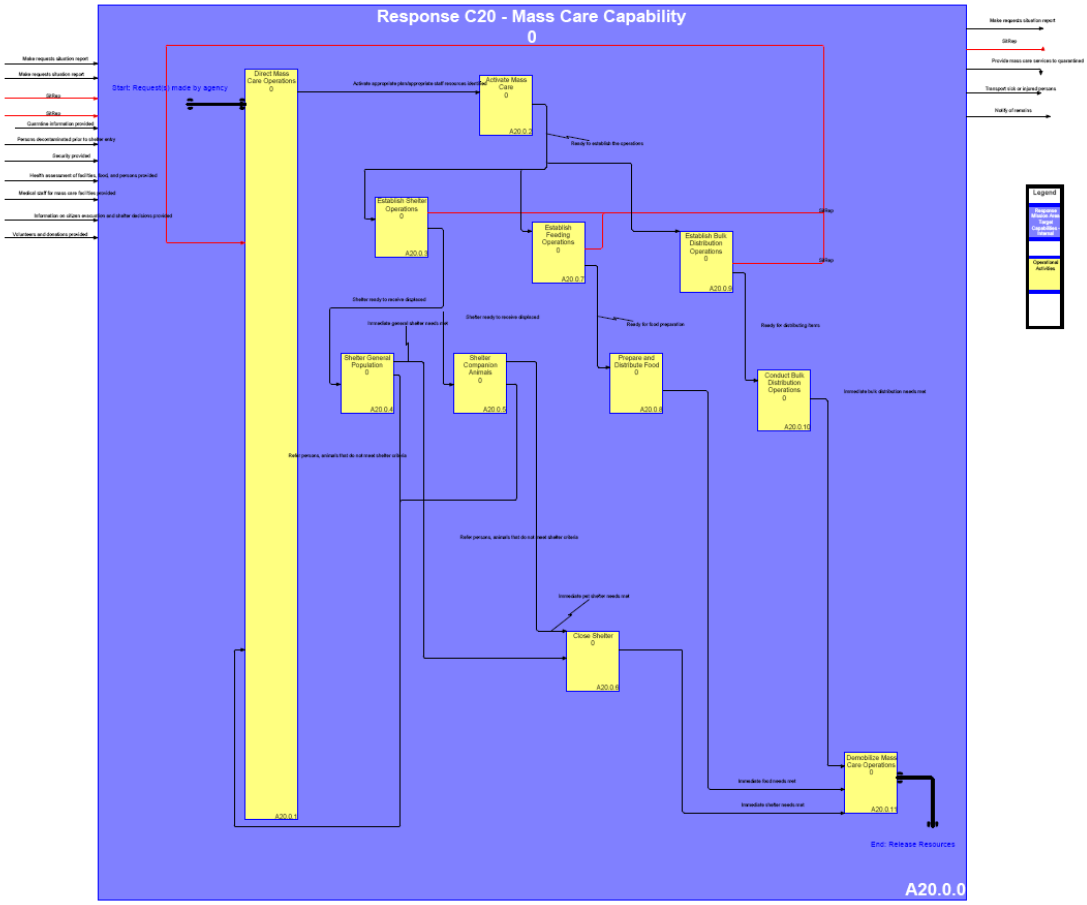
Response C19 - OV-5 - Mass Prophylaxis (Activity Process Flow) [OV-05 Activity Model]



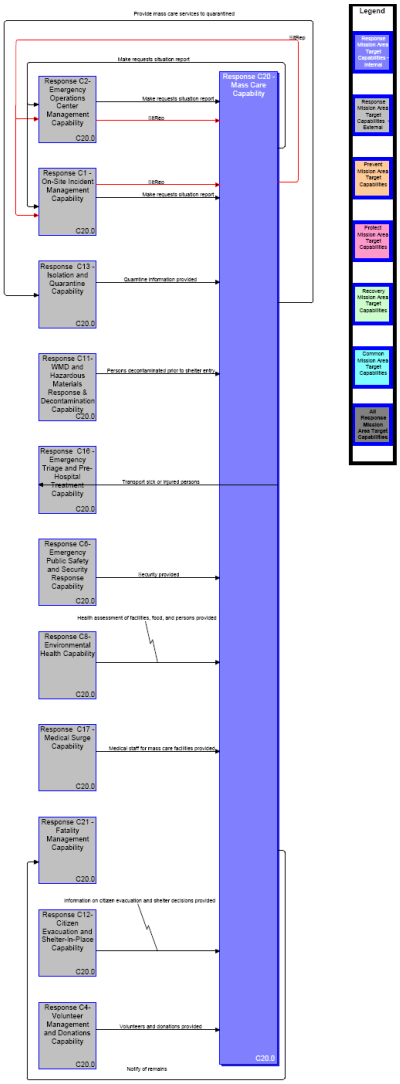
Response C19 - OV-5 - Mass Prophylaxis Link to Other Capabilities [OV-05 Activity Model]



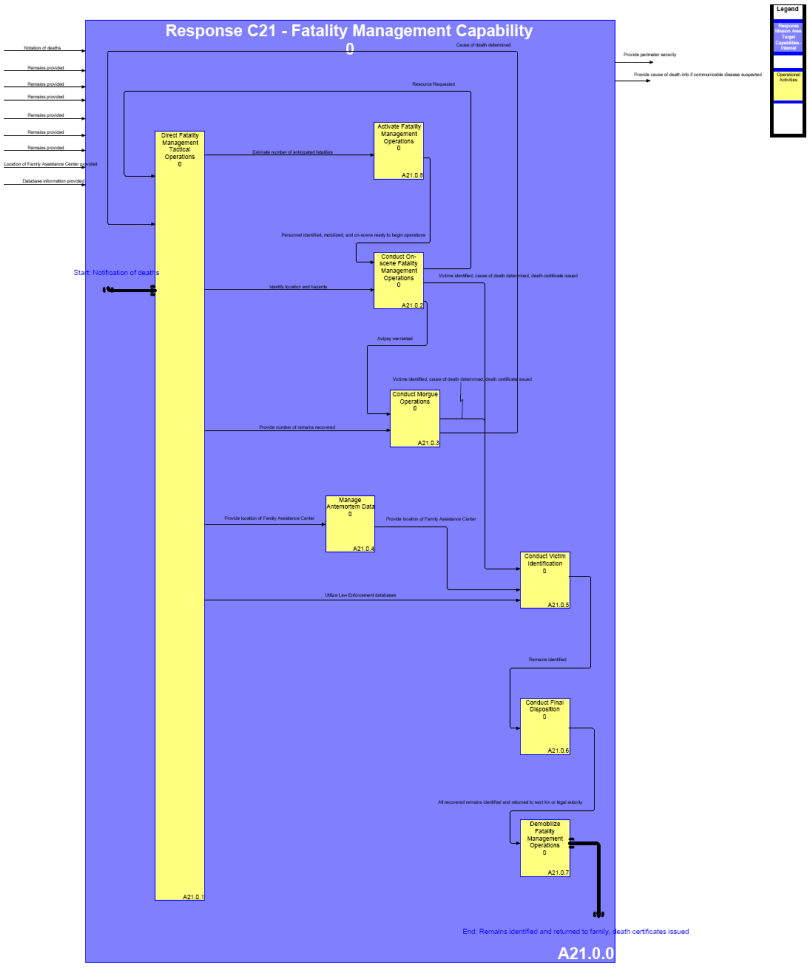
Response C20 - OV-5 - Mass Care (Activity Process Flow) [OV-05 Activity Model]



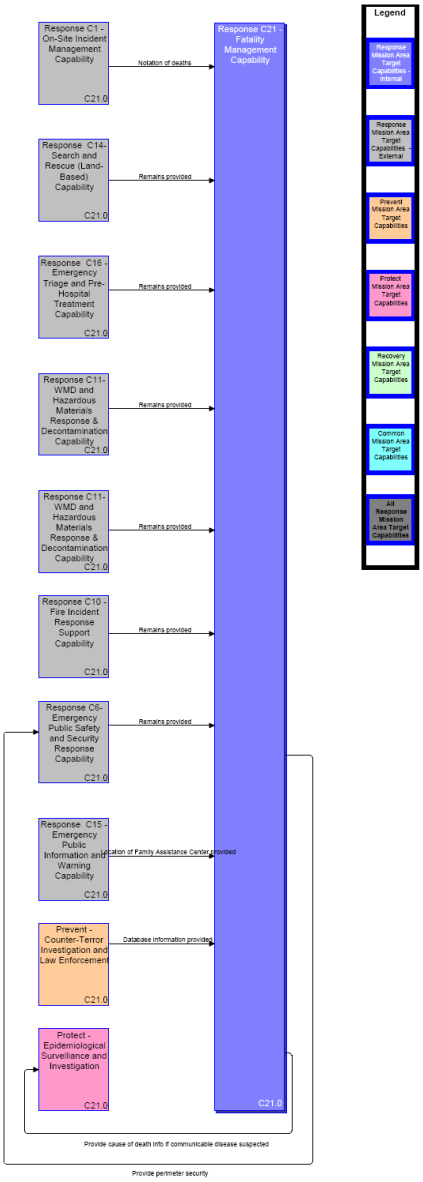
Response C20 - OV-5 - Mass Care Link to Other Capabilities [OV-05 Activity Model]



Response C21 - OV-5 - Fatality Management (Activity Process Flow) [OV-05 Activity Model]



Response C21 - OV-5 - Fatality Management Link to Other Capabilities [OV-05 Activity Model]



Annex F SA HTML SVG Navigation

The following instruction set will facilitate the user's navigation of the HTML diagrams using SVG. Please note that this instruction set will take you through OV-2 and OV-5 diagrams; the directions[click, open file etc.] are active only when the software is in "use" mode.

F.1 General Information

1. Viewing SVG diagrams requires that your computer has the Java Runtime Environment (JRE) enabled. The minimum JRE version required is 1.4.2.13; older versions of the JRE cause SVG diagrams to display incorrectly and display an 'Applet Loading' message. You can download the JRE from: http://java.sun.com/products/archive/j2se/1.4.2_13/index.html.

2. Another requirement is SVG viewer. Download SVG viewer for free from: http://www.adobe.com/svg/viewer/install/main.html

3. To view HTML report, open HTML report folder.

4. Double click on "Canadian EM.htm" file and the following page will appear:

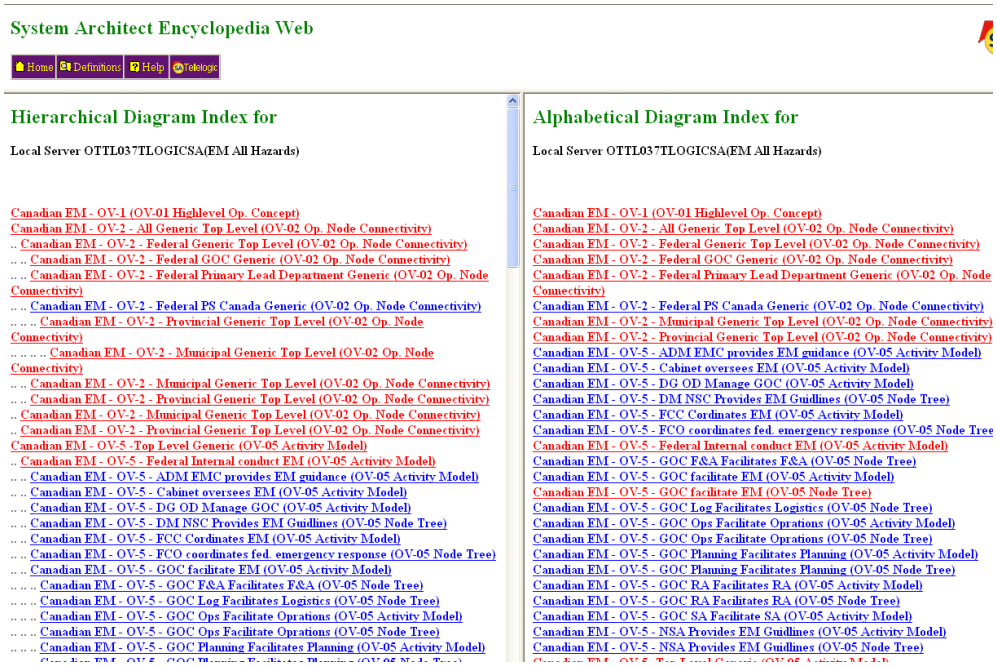


Figure 24 Canadian EM Home Page

5. Figure 24 depicts "Canadian.htm" page, the home page for the report, which uses a frame-based template[19]. The characteristics of this template are:

    a) Top frame holds "Home", "Definition", "Help" and "Telelogic" icons

    b) Right side Frame encloses the "Hierarchical Diagrams Index"

    c) Left side Frame encloses the "Alphabetical Diagrams Index"

6. To choose a diagram, click on the diagram title displayed in either the "Hierarchical Diagrams Index" or "Alphabetical Diagrams Index".

    a) In order to view the diagram, the program will download it. As soon as you click on the diagram title, Internet Explorer displays an Information Bar (just below the address bar) where you can see information about downloads, blocked pop-up windows, and other activities. This information helps you to avoid potentially harmful files that you might otherwise accept from the Internet.

    b) To be able to see the pictures right click on the information bar and click on "Allow Blocked Content" (Figure 25) and the diagram will populate the window.

[19] All the HTML pages in the HTML report are created using a frame-based template.

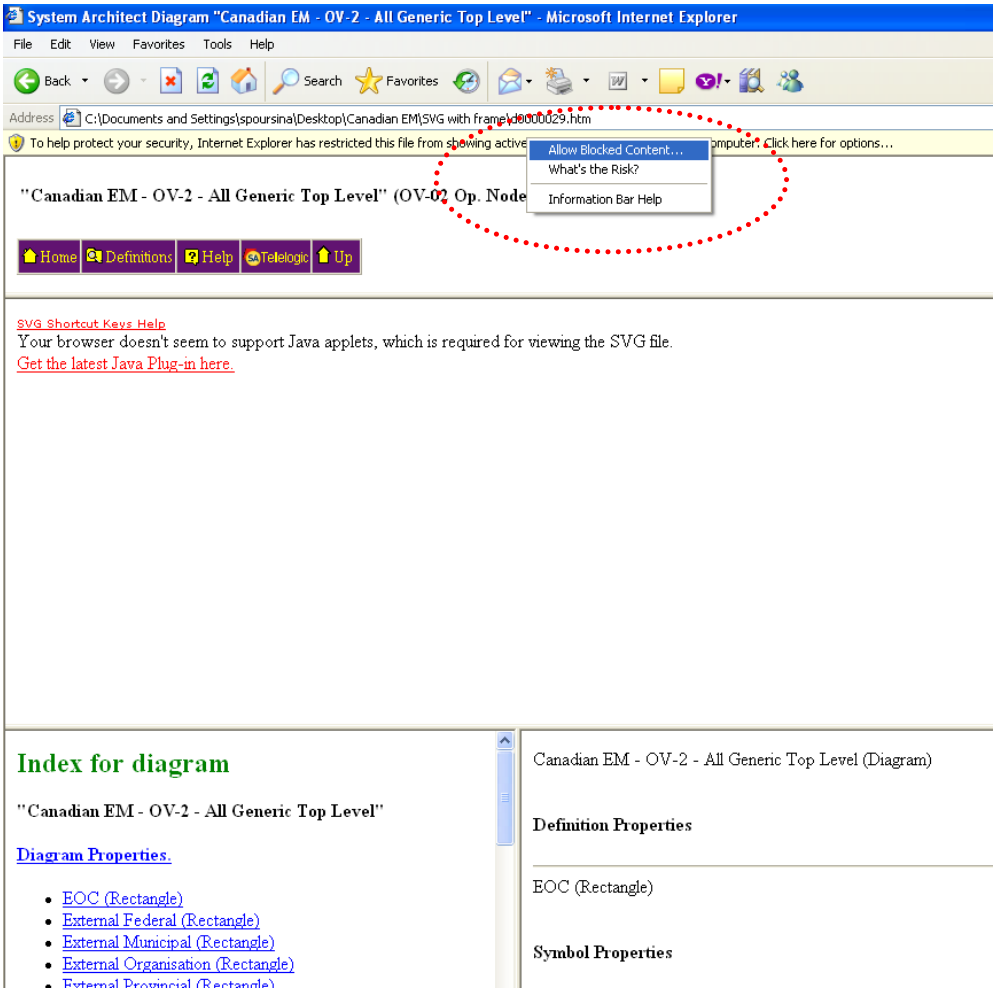


Figure 25 Viewing Diagrams – Allowing Blocked Content "Pop-up"

7. As you scroll through the diagrams, you will note that each page includes 4 frames: The top frame holds the diagram title, the middle frame holds the diagram, the bottom left frame displays a list of all the entities in the diagram, and the bottom right frame provides detailed textual information for each entity you click on within the diagram.

8. Navigation options for SVG Diagrams:

    a) You can view help for navigation by clicking on the SVG **Shortcut Keys Help** link which appears on all pages with SVG

graphics (Figure 50).[20] This will give you a pop-up of textual descriptions.

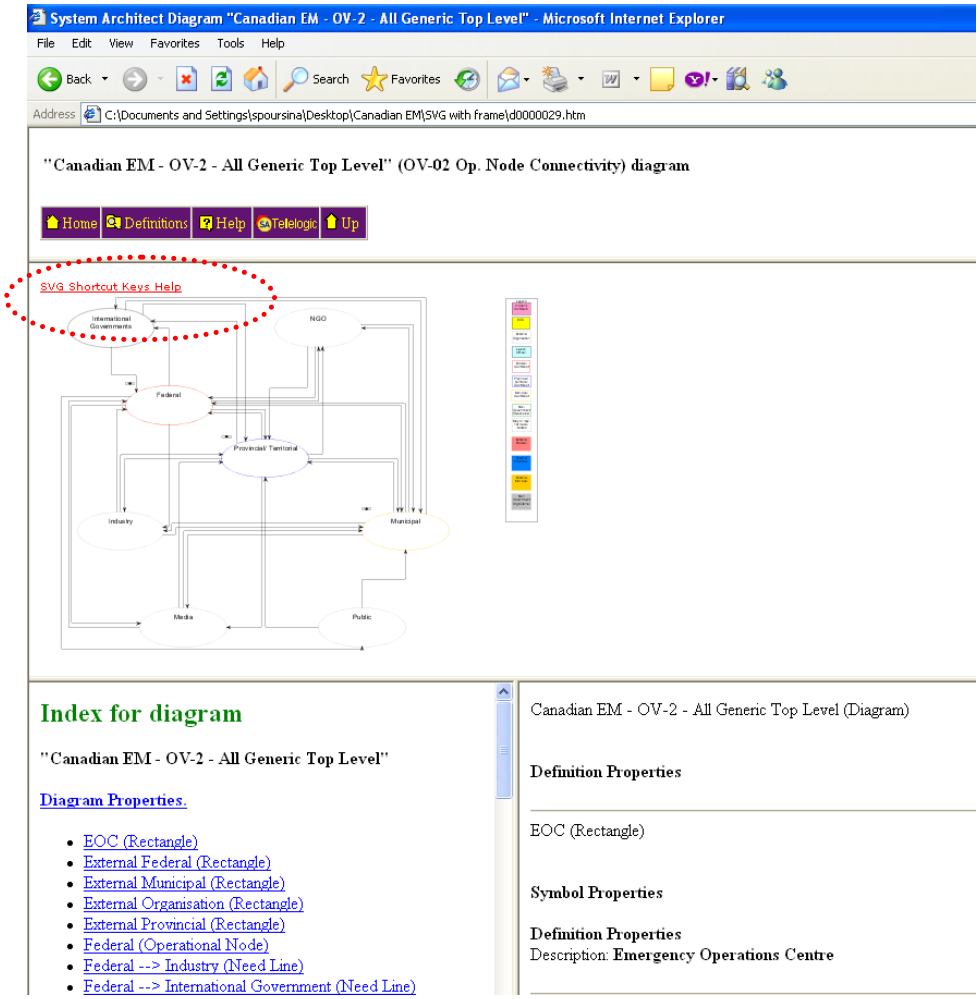


Figure 26 SVG Shortcut Keys Help

b) If you right-clicking your mouse anywhere on the diagram, a simple SVG diagram navigation menu will appear (Figure 27). This menu will enable you to zoom in or out as you mouse click on the options.

[20] To activate the SVG diagram click on the panel first

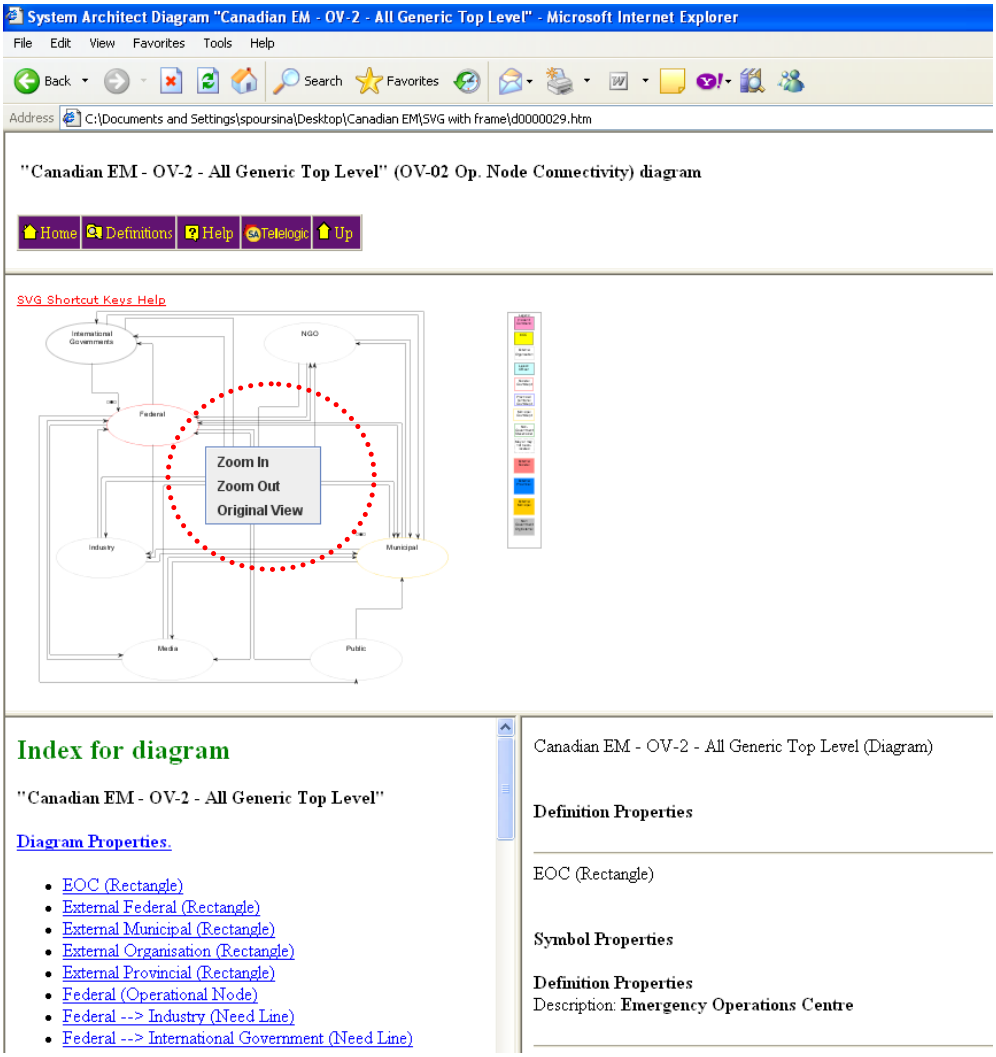


Figure 27 SVG Viewer Help Using Right Click Menu

c) You also have the choice to use the arrow keys on your keyboard to reposition each diagram - left, right, up and down.

9. If at any time the diagram fonts are not readable, you can either zoom in (see item 7 above) or position the mouse arrow over the image of your choice to make a text-box pop up with the node or needline title (Figure 24).

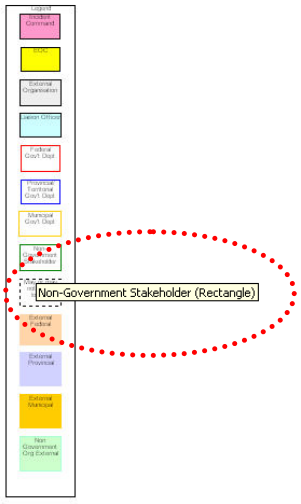


Figure 28 Viewing Small Text

10. The symbol: ●○○ on a diagram denotes that a comment with additional information is available. To view the comment, click on the symbol as demonstrated in Figure 25:

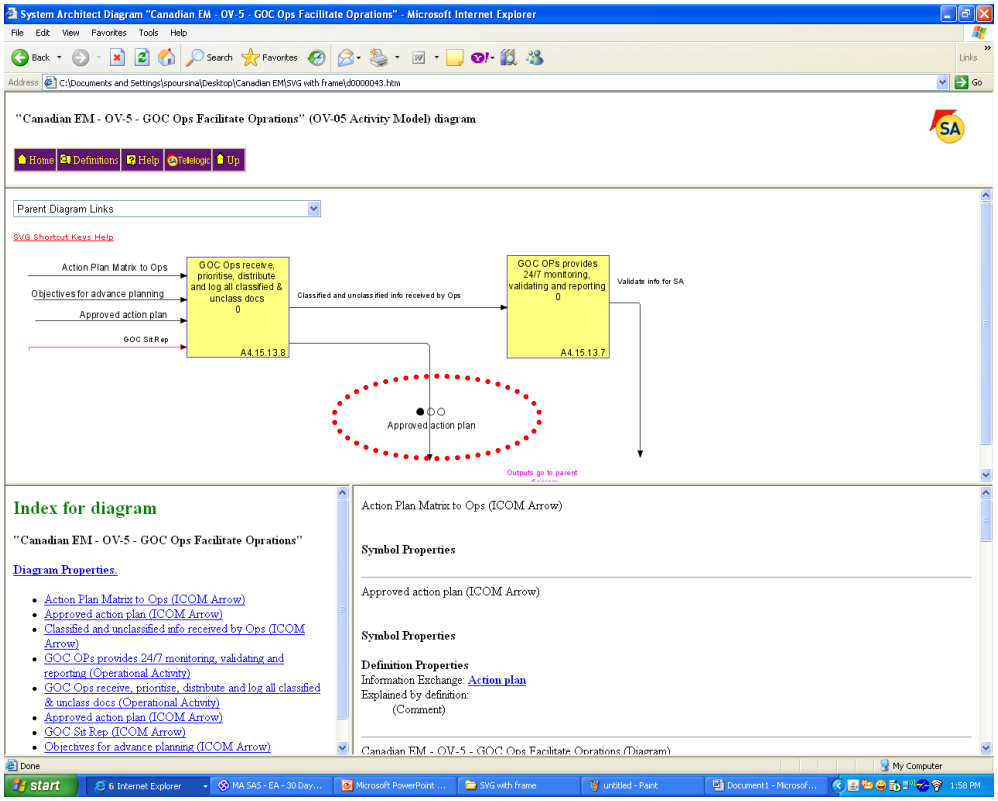


Figure 29 Additional Comment Symbol

F.2 OV-2 Viewing

The following steps are applicable for viewing any of the OV-2 diagrams listed on the "Canadian EM.htm" home page.

1. To view an OV-2 diagram, chose a OV-2 diagram from "Diagram Hierarchical Index":

    a) Click on "**Canadian EM - OV-2 – Top Level - Generic (OV-02 Op. Node Connectivity)**"

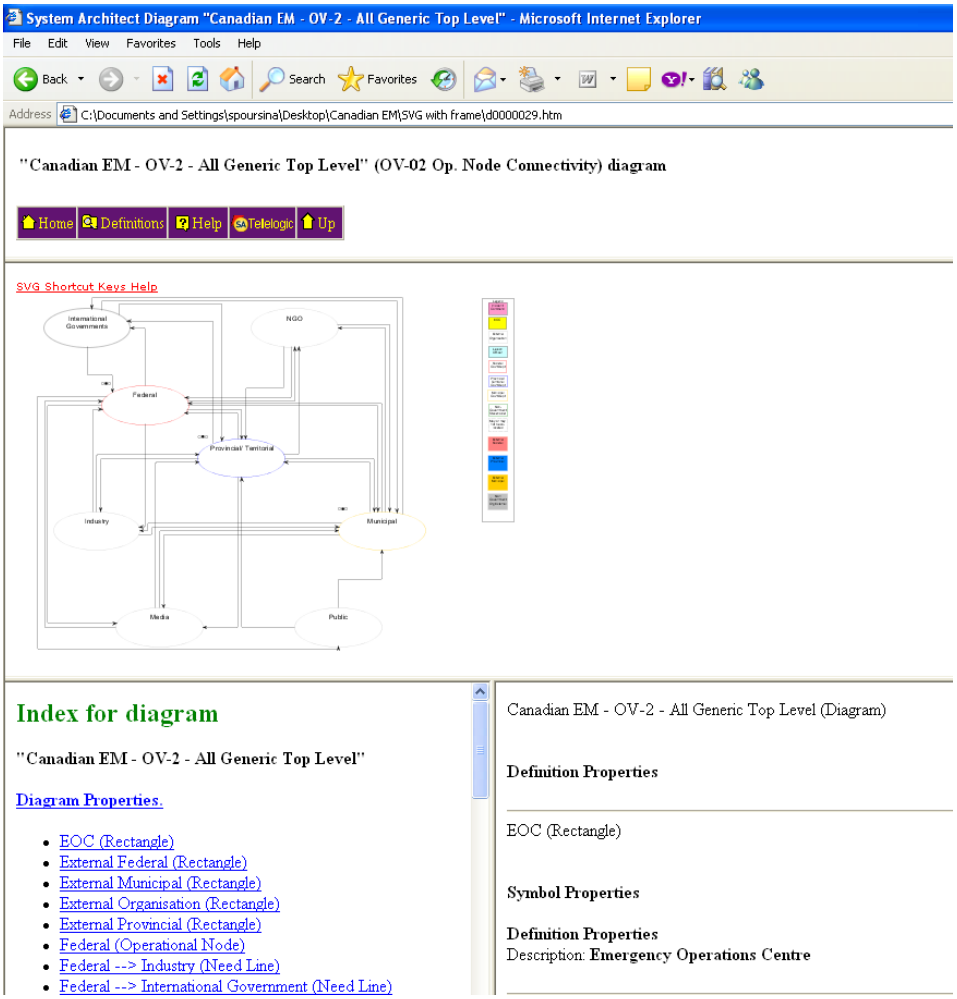


Figure 30 "Canadian EM - OV-2 - All Generic..."

2. In the above OV-2 diagram, the oval shapes represent the operational nodes and the lines between them represent the connectivity between the nodes, called needlines. For example, the Federal node has needlines reaching out to International Governments, NGO, Provincial, Industry, and Media.

3. On the right side of the OV-2 diagram in the middle frame, there is a legend which provides information about the colour coding schema used in the OV-2 diagrams.

4. In Figure 27 notice also there are three dots to the top left of the "Federal" operational node.

   The symbol: ○●○ on the top left side of operational nodes denotes the operational nodes that have child diagrams detailing lower level data.

a) To open the child diagram move your mouse over the three dots and click on the three dots.

5. To see all the detailed information (description, child diagram, ref. document, etc.) related to a specific node, for example “Federal”: click on the Federal operational node. This will update information in the bottom right frame which includes the child diagram URL plus all the attributes and relationships related to the Federal operational node (Figure 31).

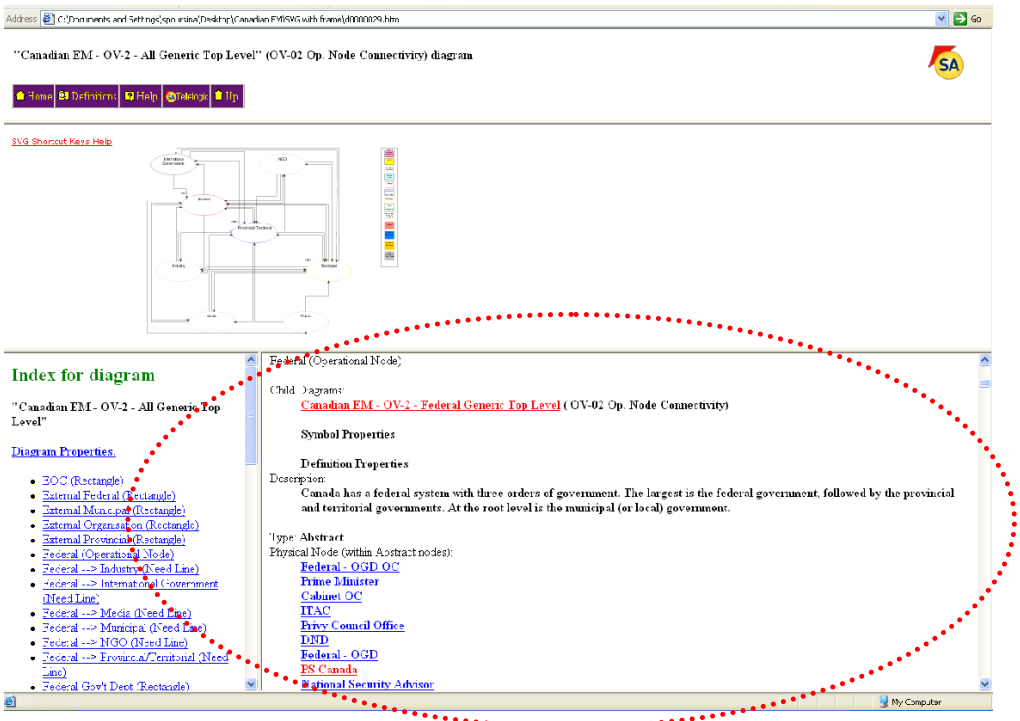


Figure 31 Operational Nodes’ attributes and relationships in the bottom right frame

a) In Figure 27 above, you can scroll down the bottom right frame to see all detail recorded in the database regarding this node. This may include the description, the operational activities performed by this node, physical node detail, and any reference documents.

b) If you click on any of the links in this frame you will get information for that topic.

c) For example if you click on “Canadian EM-OV-2 Federal Generic Top Level” you will be taken to the child diagram attached to the “Federal” operational node:

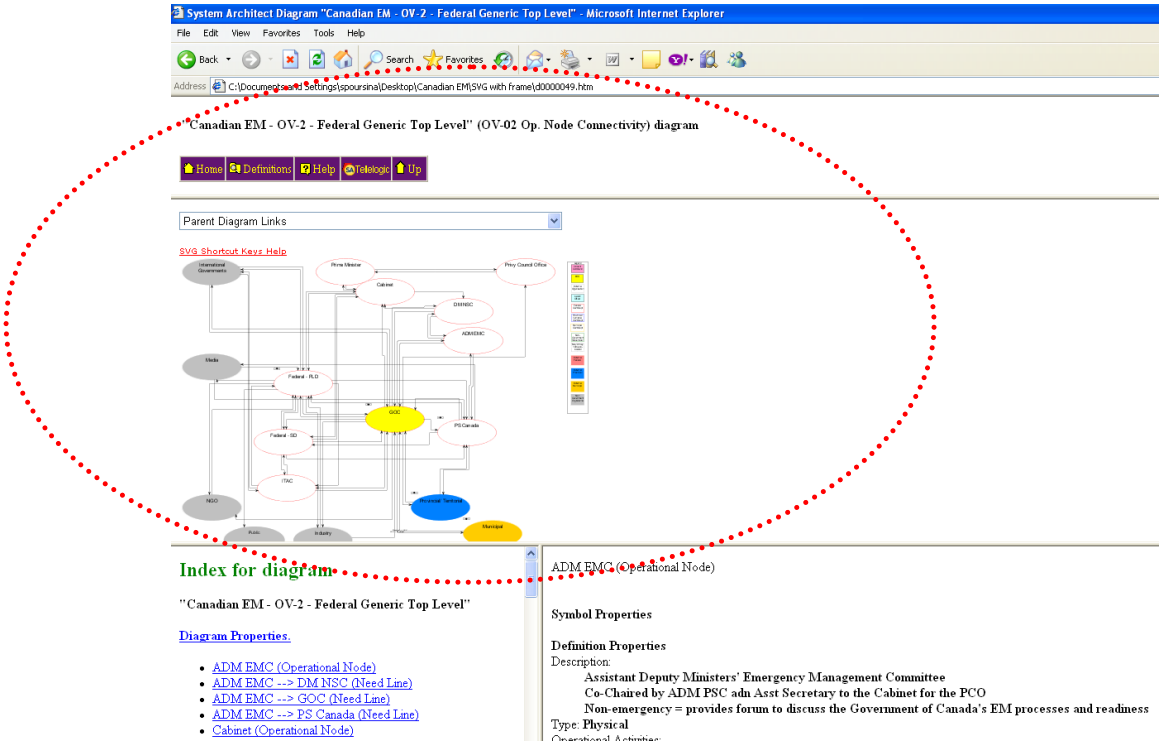


Figure 32 Canadian EM-OV-2 Federal Generic Top Level

F.3 OV-5 - Viewing (FERP based diagrams)

The following steps are applicable for viewing any of the OV-5 diagrams listed on the "Canadian EM.htm" home page that are based on the FERP. These diagrams can be recognised by their title - their titles start with the name "Canadian EM – OV-5…"

6. To view an OV-5 diagram that is based on the FERP, chose a OV-5 diagram from an index:

   a) For example click on **"Canadian EM – OV-5 – Top Level Generic" (OV05 Activity Model) Diagram":**

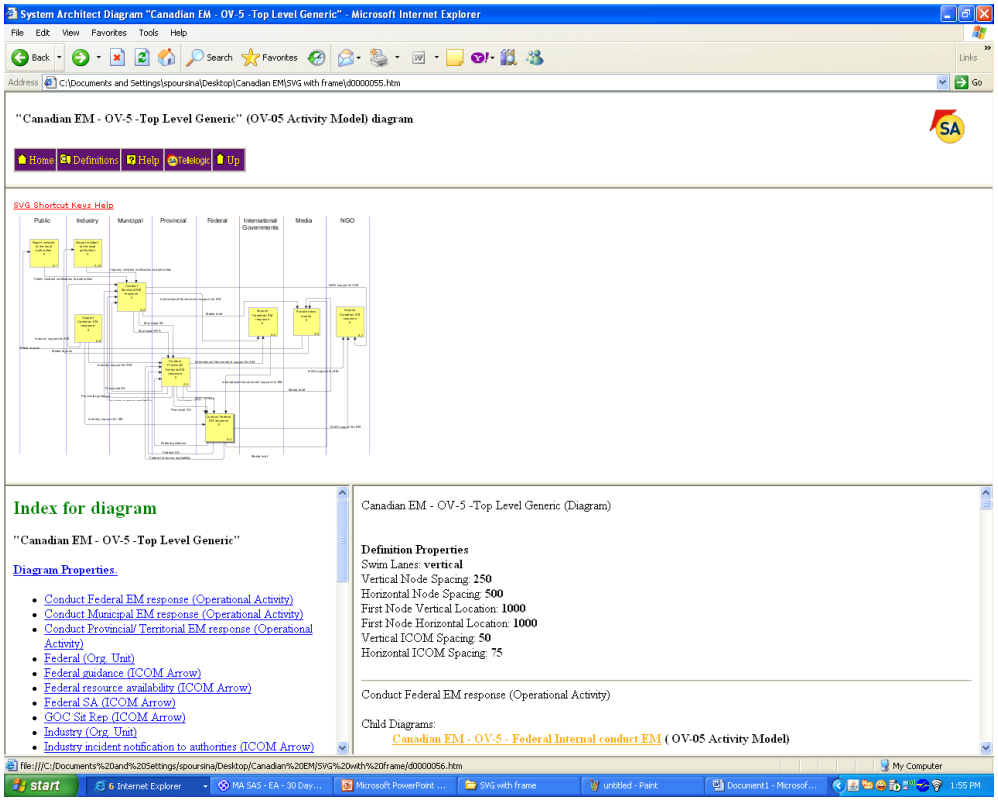


Figure 33 Canadian EM –OV-5 – Top Level Generic Diagram

b) An OV-5 shows links to parent and child operational activities similar to the OV-2 parent and child operational nodes. However, in an OV-5, the activities which are linked to child activities are denoted by a shaded activity box (Figure 39).

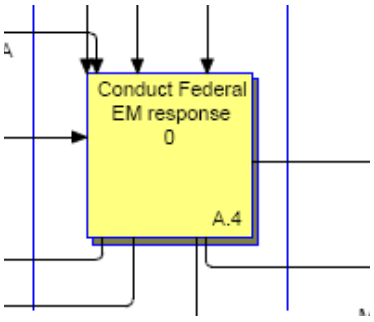


Figure 34 OV-5 Shaded Activity Denoting Link to Child Activity Diagram

7. In Figure 39, each square represents an activity, i.e., “Conduct Federal EM Response”.

8. By clicking on an activity, details regarding this activity will appear in the bottom right frame. This textual detail of the activity including hyperlinks to any child diagrams[21] and reference documents (Figure 31):

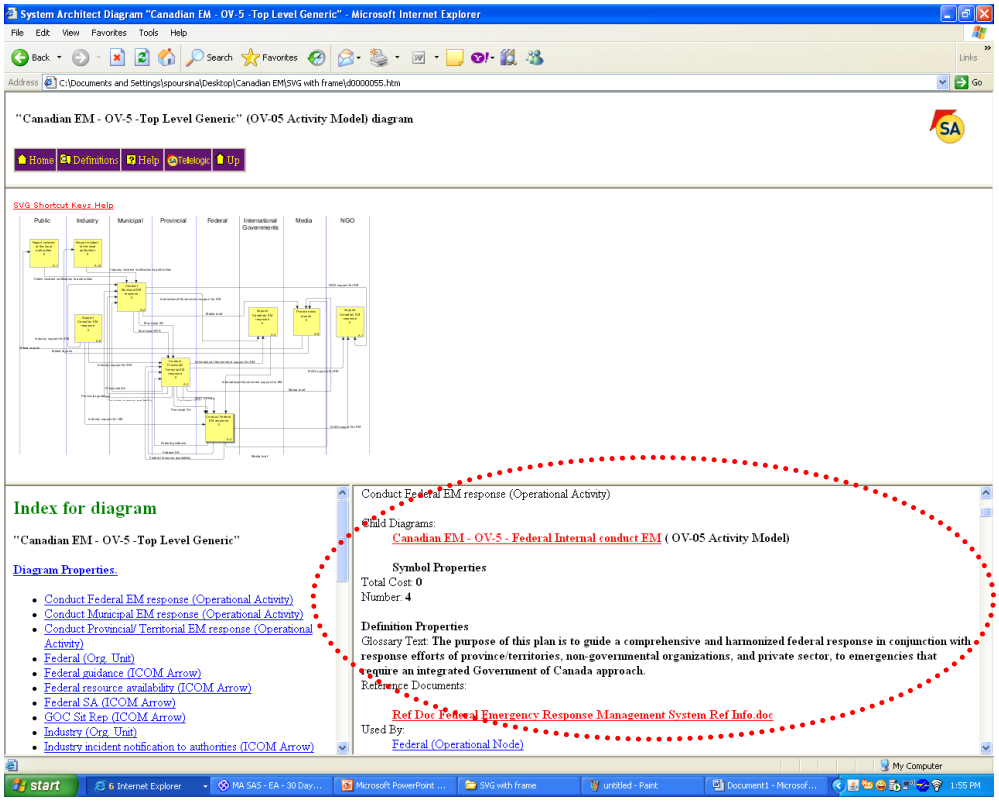


Figure 35 Specific Activity Detail Displayed in Bottom Right Frame

a) By clicking on the child diagram title in the text description frame, you will be taken to the child diagram (i.e. Federal Internal Conduct EM) (Figure 42):

[21] Please note that in the OV-5 there is no direct link to the child diagram via the “3-dot” symbol that we saw for OV-2 diagrams

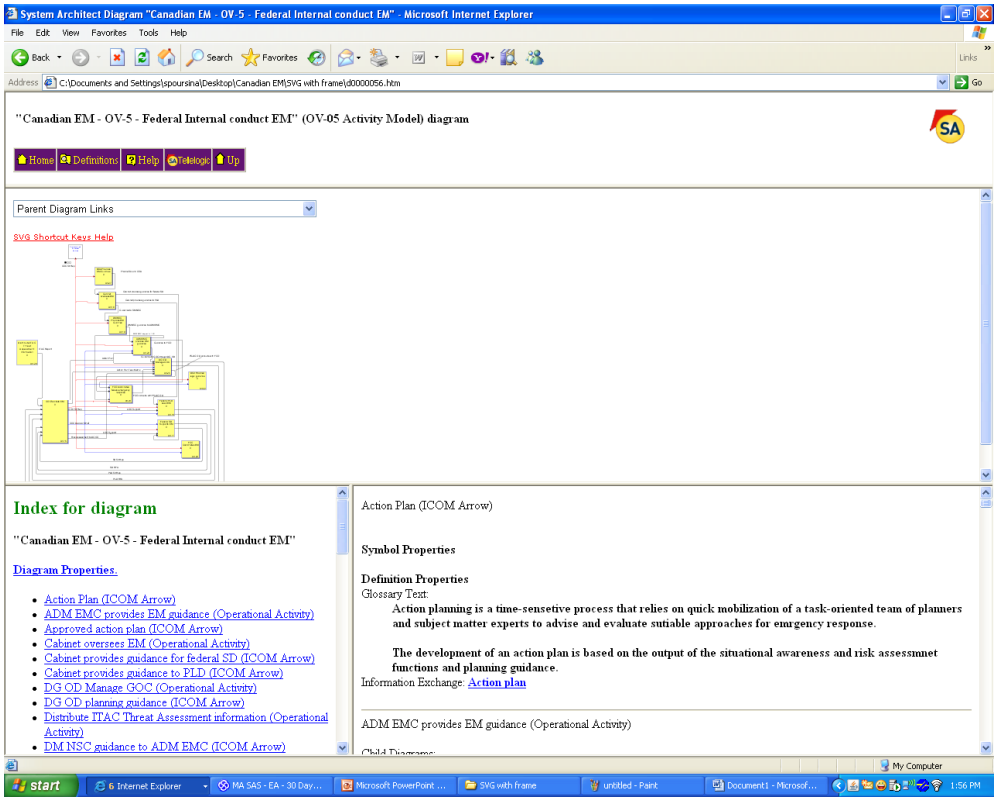


Figure 36 Canadian EM – OV-5 – Federal Internal Conduct EM Diagram

9. Both Activity Models and Node Trees have been developed for the OV-5 product. The title of the diagram denotes the type of diagram. For example in the diagram "Canadian EM – OV-5 – Federal Internal Conduct EM (OV-5 – Activity Model)", the "GOC Facilitate EM" activity has two child diagrams, *"Canadian EM – OV-5 – GOC Facilitate EM (OV-5 Activity Model)"* and *"Canadian EM – OV-5 – GOC Facilitate EM (OV-5 – Node Tree)":*

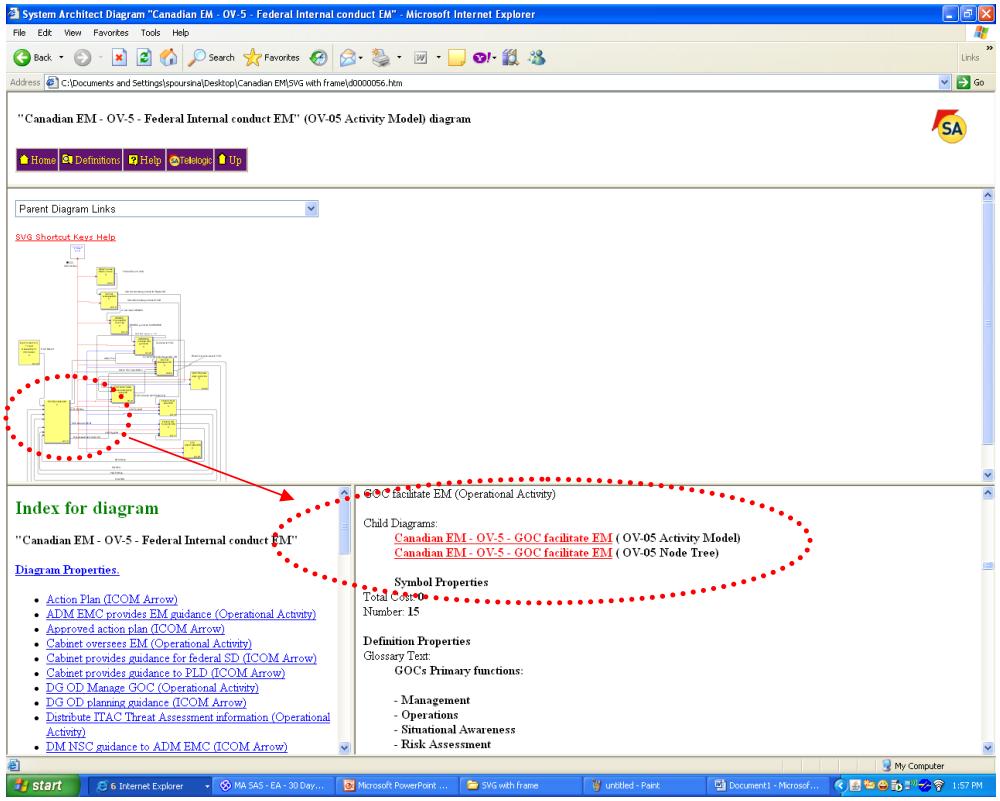


Figure 37 Canadian EM – OV-5 – Federal Internal Conduct EM Illustrating Child Diagram Detail

10. Information exchange entities are shown as inputs and outputs to the activities. Situation Reports (SitReps) and Decision Briefs are colour-coded to ease the visual. SitReps are colour-coded red and Decision Briefs are colour-coded blue.

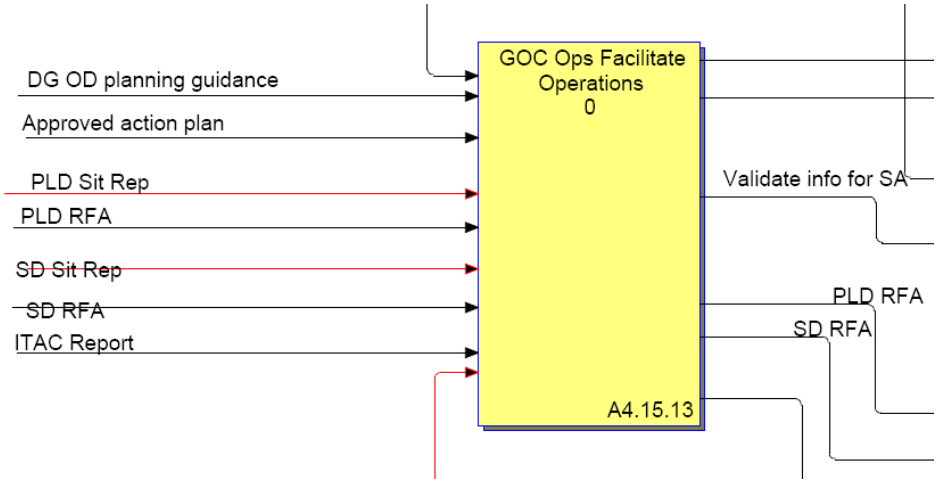


Figure 38Information Exchanges as Activity Inputs and Outputs

F.4 OV-5 - Viewing (TCL based diagrams)

The following steps are applicable for viewing any of the OV-5 diagrams listed on the "Canadian EM.htm" home page that are based on the TCL. These diagrams can be recognised by their title - their titles start with the name "Response C#…" There are 21 Response Capabilities and the titles reflect their number 1 to 21 as follows:

1. On-site Incident Management
2. Emergency Operations Centre Management
3. Critical Resource Logistics and Distribution
4. Volunteer Management and Donations
5. Responder Safety and Health
6. Emergency Public Safety and Security
7. Animal Disease Emergency Support
8. Environmental Health
9. Explosive Device Response Operations
10. Fire Incident Response Support

11. WMD and Hazardous Material Response and Decontamination

12. Citizen Evacuation and Shelter-In-Place

13. Isolation and Quarantine

14. Search and Rescue (Land Based)

15. Emergency Public Information and Warning

16. Emergency Triage and Pre-Hospital Treatment

17. Medical Surge Capability

18. Medical Supplies Management and Distribution

19. Mass Prophylaxis

20. Mass Care

21. Fatality Management

Response C0 represents "Response Capability 0", the top level diagram illustrating all response capabilities.

1. To view an OV-5 diagram that is based on the TCL, chose a OV-5 diagram from and index on the home page:

    a) For example click on "**Response C0 - OV-5 - Respond Mission Area Target Capabilities Top Level (OV-05 Activity Model)**"

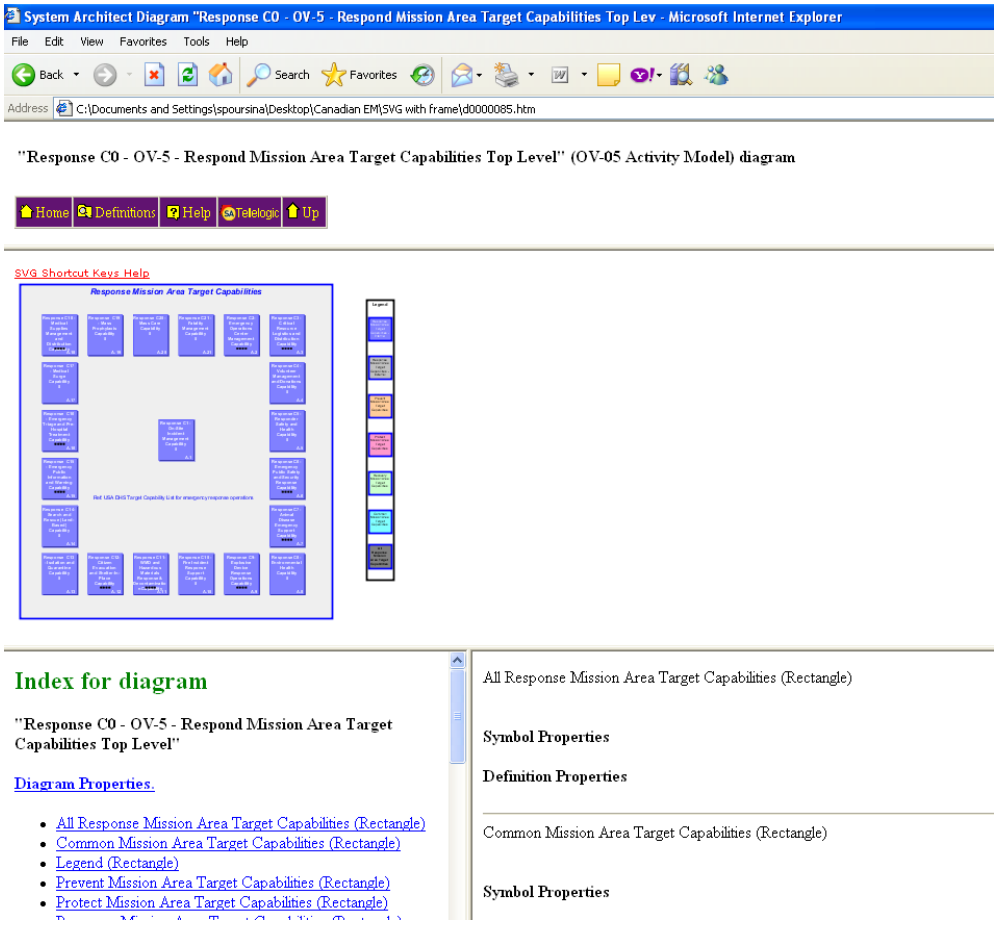


Figure 39 Respond Mission Area Target Capabilities Top Level (OV-05 Activity Model)

b) The legend on the right side of the diagram in the middle frame provides the colour coded legend information.

c) An OV-5 shows links to parent and child operational activities similar to the OV-2 parent and child operational nodes. However, in an OV-5, the activities which are linked to child activities are denoted by a shaded activity box (Figure 39).

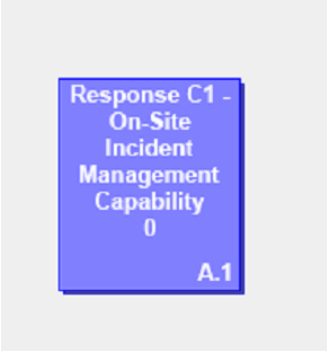


Figure 40 OV-5 Shaded Activity Denoting Link to Child Activity Diagram

2. In Figure 39, each square represents one capability in the response mission area of the TCL. To view the details of a specific activity box, click on the activity box, i.e., the "Response C1 – On-Site Incident Management Capability".

    a) This will open up the page in the bottom right frame that will have the textual detail of that activity (Figure 41) including hyperlinks to any child diagrams[22] and reference documents.

[22] Please note that in the OV-5 there is no direct link to the child diagram via the "3-dot" symbol that we saw for OV-2 diagrams

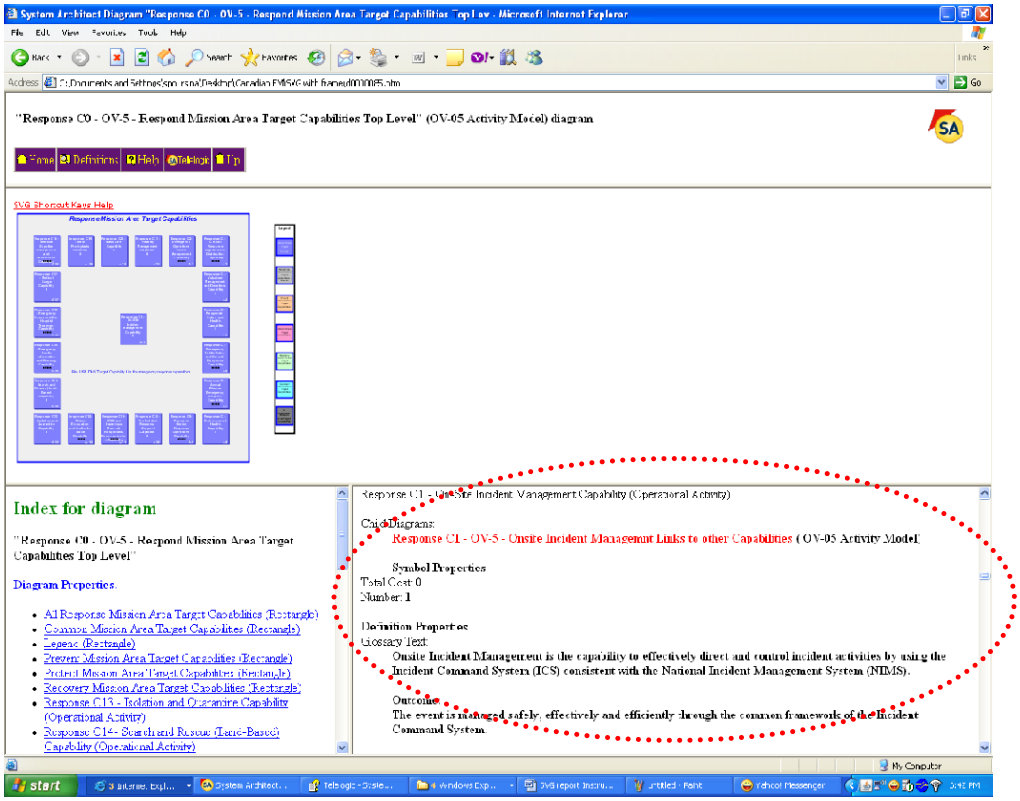


Figure 41 Response C1 -On-Site Incident Management Capability Details

b) By clicking on the child diagram title you will be taken to the child diagram (i.e. Response C1 - On-Site Incident Management Capability (Figure 42)).

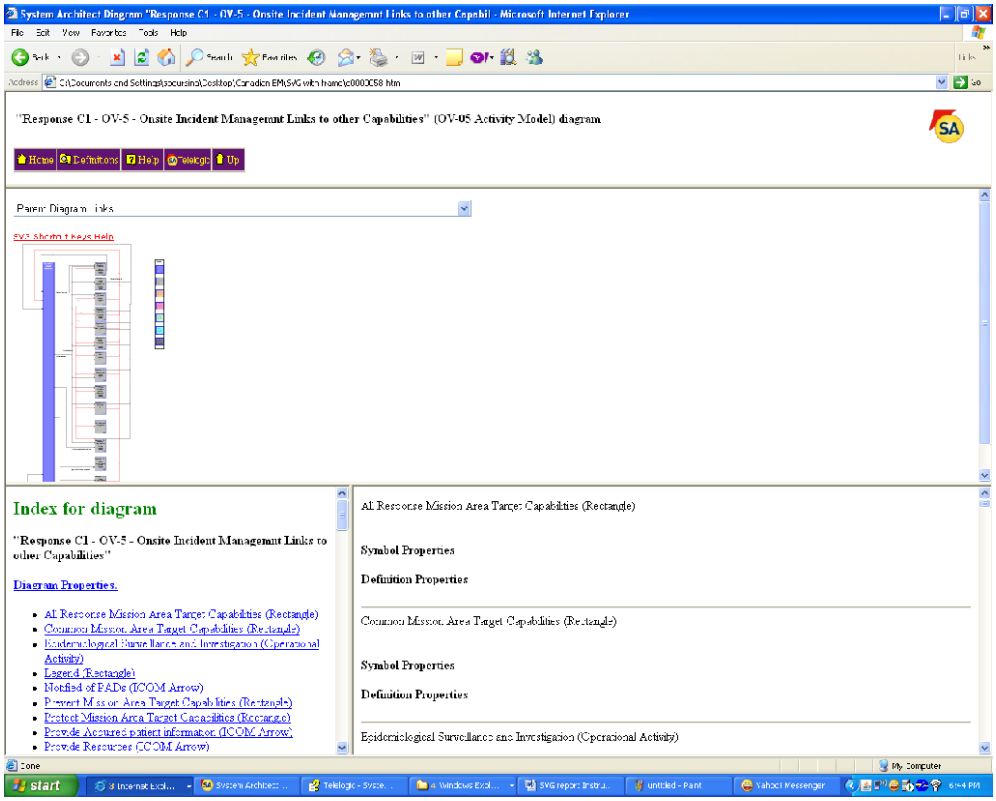


Figure 42 On-Site Incident Command Response Capability Links to Other CapabilitiesDiagram

3. Note that in the OV-5 diagrams developed using the TCL, the top level diagrams represent the capabilities. Lower level child diagrams detail the activities required to deliver the capability. For example, to view the activity process flow diagram for the "On-Site Incident Command Response Capability Links to Other Capabilities" diagram presented above, click on the internal capability coloured in blue. This will open the text detail in the bottom right frame from which you can click on the child diagram link to see the diagram below:

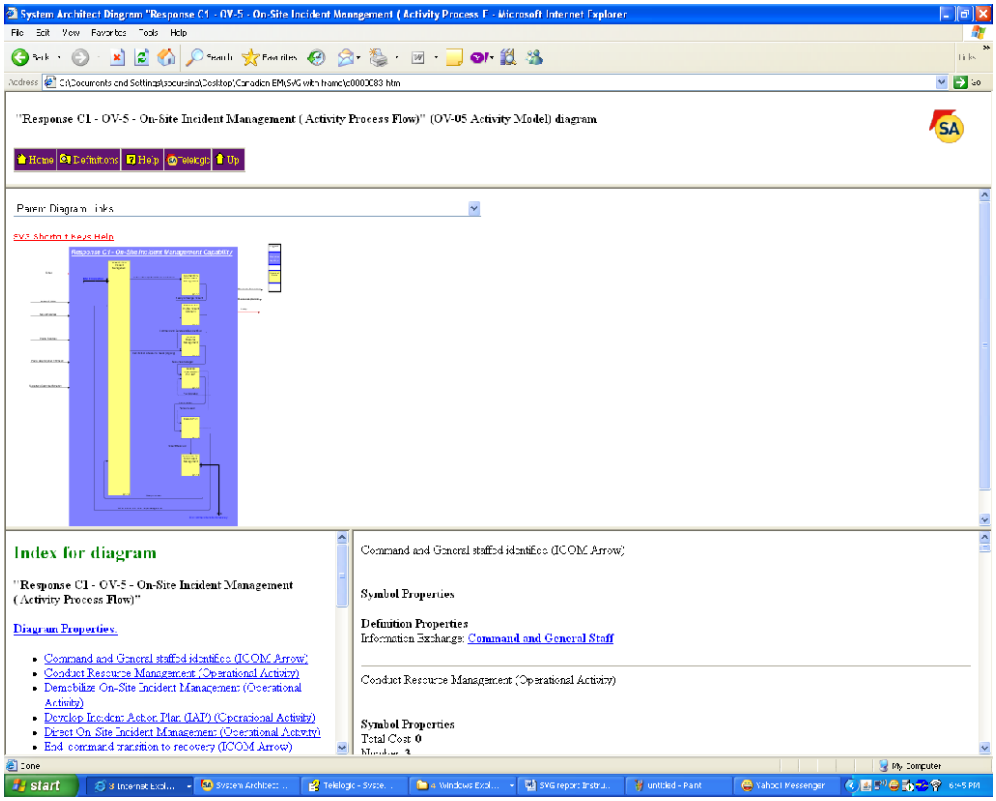


Figure 43 Response C1 - On-Site Incident Management Capability Activity Process Flow Diagram

4. Figure 39 illustrates the activity process flow diagram for On-Site Incident Management. The characteristics of the TCL based diagrams include:

    a) Each yellow rectangle depicts the operational activity performed within this capability.

    b) Each diagram denotes an operational flow start and end point.

    c) More detail about each activity can be obtained by clicking on and activity and then referring to the bottom right frame to view its description and any related links.

5. The Technical Authority for this project specifically asked to go one level down for "Response C2 – Emergency Operation Management Capability" to create "Critical Tasks"

node trees for each individual activity and attach a reference document, the Operations Performance Matrix, for each individual activity. To view this data, proceed to the Response C2-Emergency Operation Management Capability either via an Index from the home page:

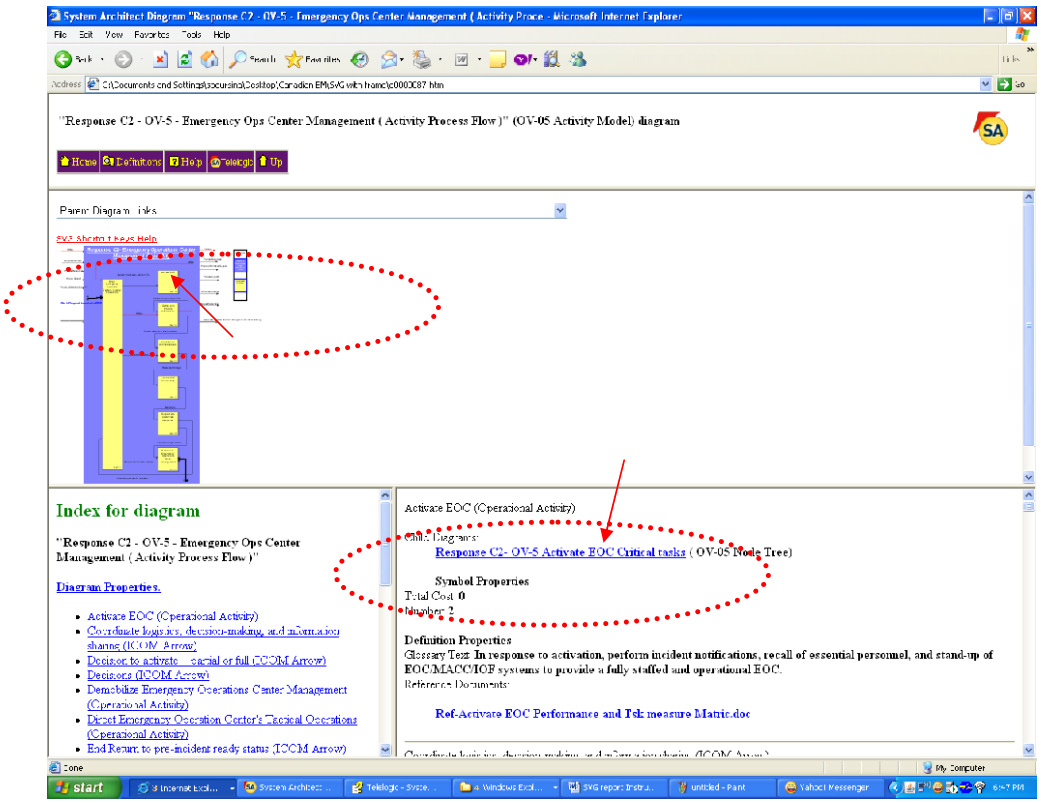


Figure 44 Response C2 – Emergency Operation Management Capability

a) Each one of the activities included in this diagram have child diagrams in the form of node trees developed to document the necessary critical tasks. For example, first click on "Activate Emergency Operation Center (EOC)" activity (Figure 40) then refer to the bottom right frame and click on the child diagram hyperlink to view the critical tasks node tree associated with this activity (Figure 41):

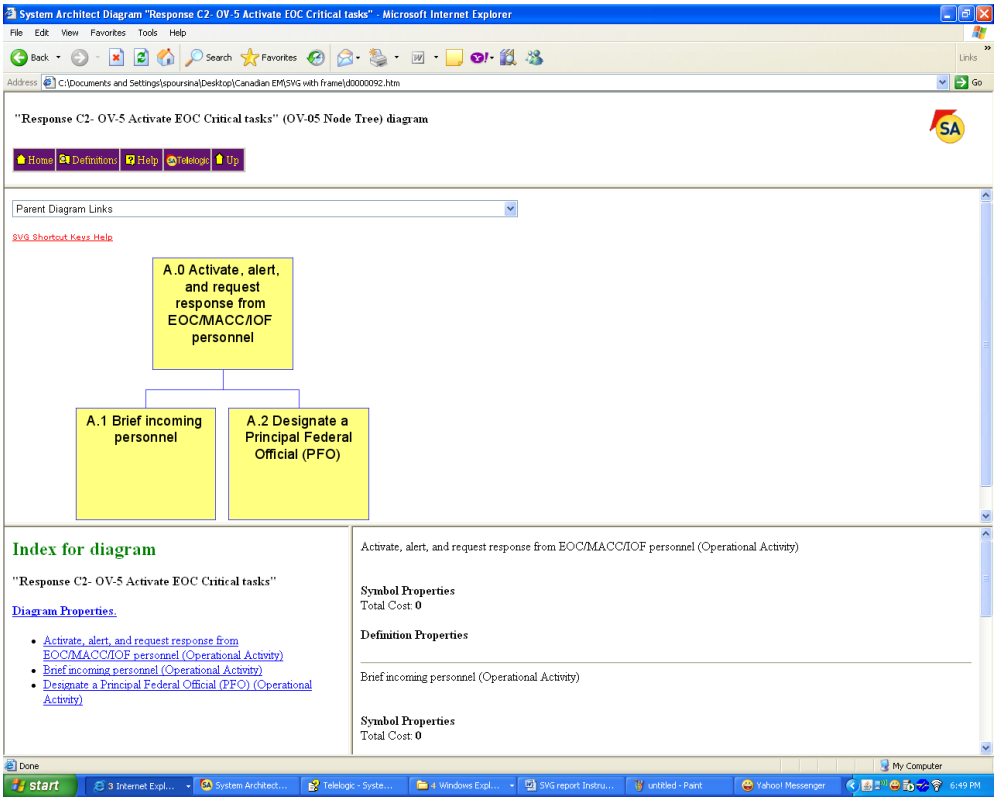


Figure 45 Direct EOC Tactical Ops critical tasks tree node

b) Scroll through the textual detail in the bottom right frame and click on Reference Document to view the "Direct EOC Tactical Performance Matrix" (Figure 42):

Performance Tasks and Measures/Metrics

Activity: *Direct Emergency Operation Center's Tactical Operations* **Definition: In response to notification of incident, activate, staff, and organize the EOC/MACC/IOF in accordance with emergency plans and standard operating procedures; plan, direct, and coordinate information and activities internally within EOC/MACC/IOF functions, and externally with other multi-agency coordination entities and the public information system; coordinate logistical support to maintain an operationally functioning EOC/MACC/IOF until deactivation.**	
Critical Tasks	
Res.B1c 3.1	Establish organization/operation of EOC/MACC/IOF
Res.B1c 3.1.1	Ensure that all Emergency Support Functions (ESFs) are staffed
Res.B1c 3.3.3	Direct all support organizations participating in EOC/MACC/IOF
Res.B1c 3.1.3	Ensure appropriate maintenance and rest cycles are included in resource (personnel and equipment) management activities
Res.B1c 3.5.3.1	Arrange for shelter, housing, and feeding for responders and personnel supporting the operation per the emergency plan, as applicable
Res.B1c 3.5.3.2	Arrange for shelter, housing, and feeding for displaced responder families and general population
Res.B1c 3.3.1	Coordinate jurisdictional emergency management operations
Res.B1c 3.7	Transition from response to recovery
Res.B1c 3.7.1	Include Business Operation Center capability within state EOCs

Performance Measures	**Metric**
The emergency operations center (EOC) is activated upon notification of the incident	Yes/No
The emergency operations center (EOC/MACC/IOF) was activated upon notification of the incident	Yes/No
EOC/MACC/IOF is appropriately staffed to meet incident demands	Yes/No

Figure 46 Performance Tasks and Measure/Metrics

Annex G SA HTML JPEG Navigation

The following instruction set will facilitate the user's navigation of the HTML diagrams using JPEG. Please note that this instruction set will take you through OV-2 and OV-5 diagrams.

G.1 General Information

1. To view the HTML report using JPEG, open HTML report folder

2. Double click on "Canadian EM.htm" file and the following page will appear:

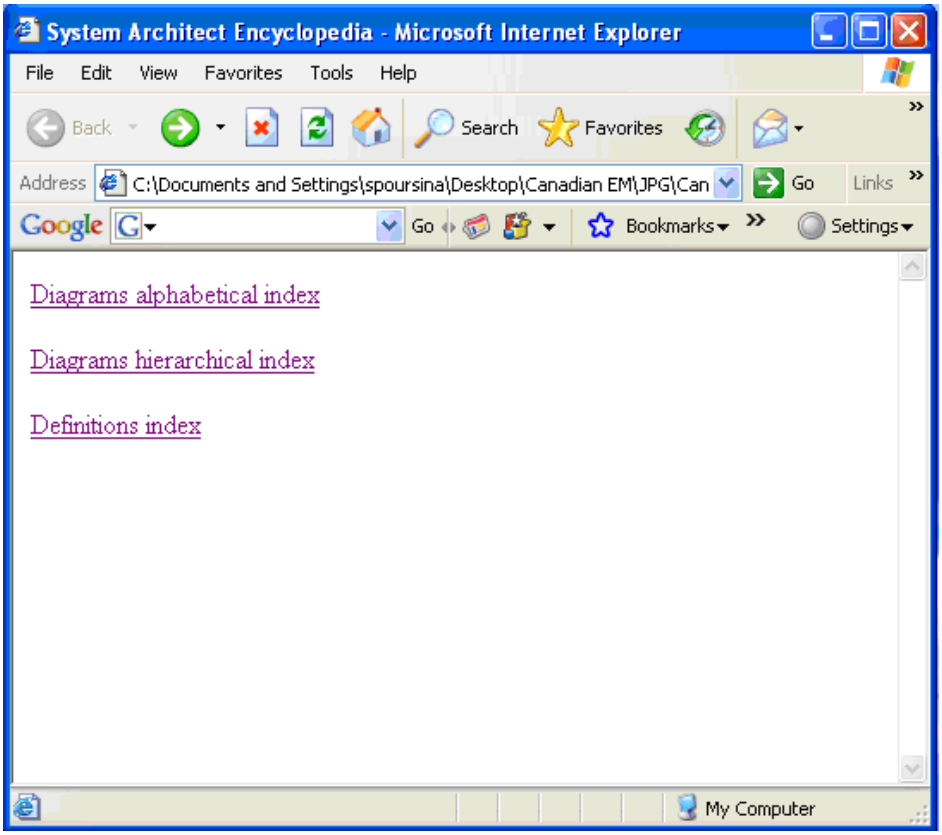


Figure 47 Canadian EM Home Page

3. Click on either the “Diagrams alphabetical index or Diagrams hierarchical index” hyperlink to open up a new page with the list of all the available diagrams.

a) For this example we chose “Hierarchical Diagram Index”:

Figure 48 Hierarchical Diagram Index

4. Diagram navigation: scroll up or down the screen to view the complete diagram. There is no zoom in or out functionality.

5. The symbol: ●○○ on a diagram denotes that a comment with additional information is available. To view the comment, click on the symbol as demonstrated in Figure 45:

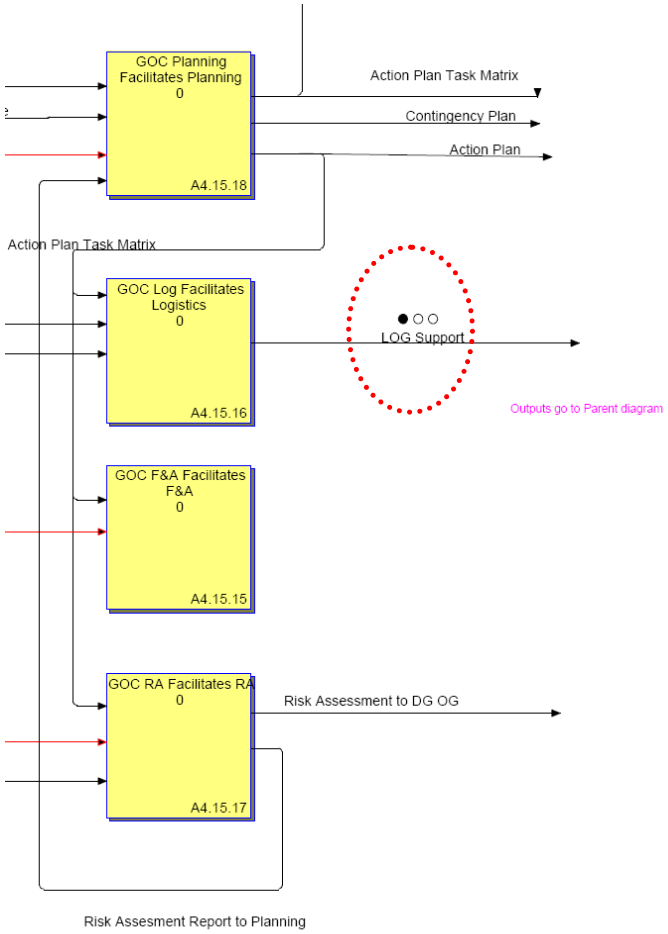


Figure 49 Additional Comment Symbol

G.2 OV-2 Viewing

The following steps are applicable for viewing any of the OV-2 diagrams listed on the "Canadian EM.htm" home page.

1. To view an OV-2 diagram, choose a OV-2 diagram from the index list, for example:

   a) Click on "**Canadian EM - OV-2 – Top Level - Generic (OV-02 Op. Node Connectivity)**"

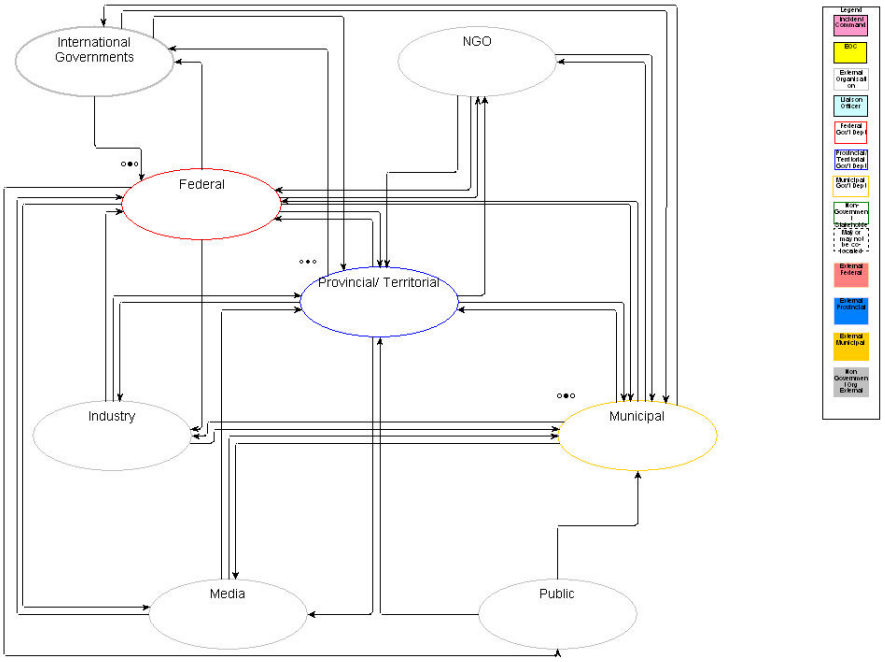


Figure 50 Example of an OV-2 diagram (OV-2 – Top Level - Generic)

2. In the above OV-2 diagram, the oval shapes represent the operational nodes and the lines between them represent the connectivity between the nodes, called needlines. For example, the Federal node has needlines reaching out to International Governments, NGO, Provincial, Industry, and Media.

3. On the right side of the OV-2 diagram there is a legend which provides information about the colour coding schema used in the OV-2 diagrams.

4. If, at any time, the fonts are not readable (i.e., too small), position the mouse arrow over the image of your choice and a text box with the description of that image will pop up (Figure 51)

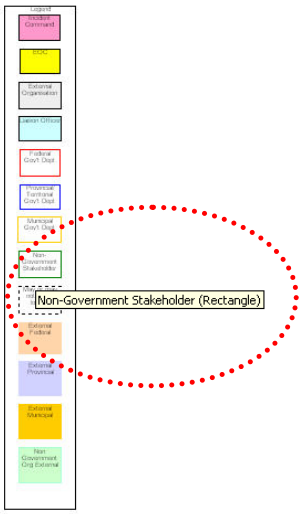


Figure 51 Text Description "Pop-up"

5. In Figure 50 notice that there are three dots to the top left of the "Federal" operational node.

   The symbol: ○●○ on the top left side of operational nodes denotes the operational nodes that have child diagrams detailing lower level data.

   a) To open the child diagram move your mouse over the three dots and click on the three dots.

6. To see all the detailed information (description, child diagram, ref. document, etc.) related to a specific node, for example "Federal", click on the Federal operational node. This will open up a new window which includes all of the attributes and relationships related to that Operational Node including any child diagram names (Figure 31).

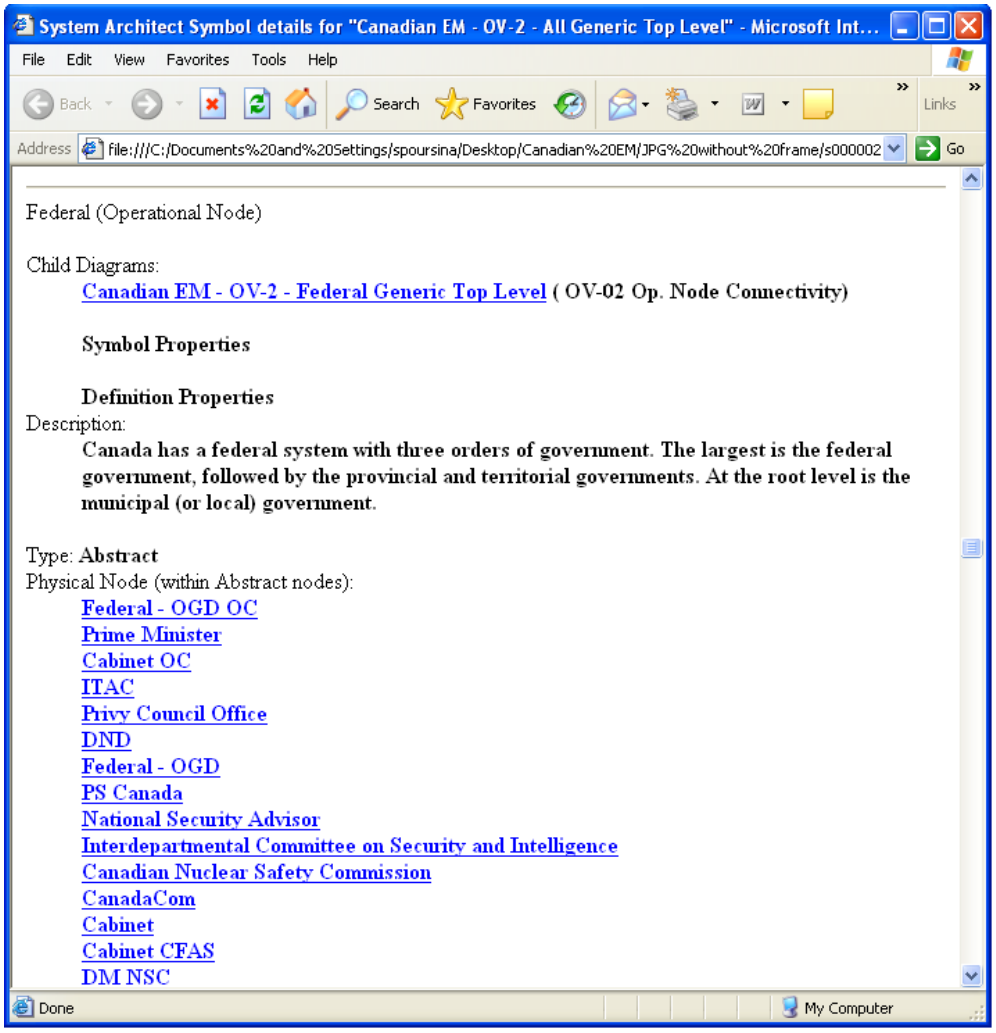


Figure 52 Operational Nodes' Attributes and Relationships

a) In Figure 48 above, you can scroll down the frame to see all detail recorded in the database regarding this node. This may include the description, the operational activities performed by this node, physical node detail, and any reference documents.

b) If you click on any of the links in this page you will get information for that topic.

c) For example, if you click on “Canadian EM-OV-2 Federal Generic Top Level” you will be taken to the child diagram attached to the “Federal” operational node:

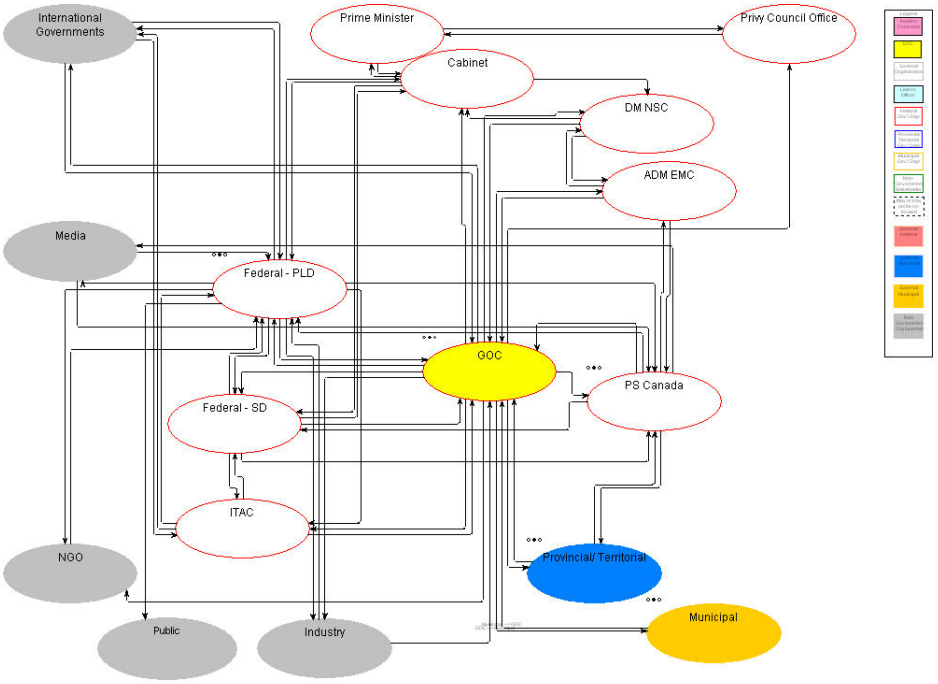


Figure 53 Canadian EM-OV-2 Federal Generic Top Level

G.3 OV-5 - Viewing (FERP based diagrams)

The following steps are applicable for viewing any of the OV-5 diagrams listed on the “Canadian EM.htm” home page that are based on the FERP. These diagrams can be recognised by their title - their titles start with the name “Canadian EM – OV-5…”

1. To view an OV-5 diagram that is based on the FERP, choose a OV-5 diagram from an index:

   a) For example click on **“Canadian EM – OV-5 – Top Level Generic” (OV05 Activity Model) Diagram”:**

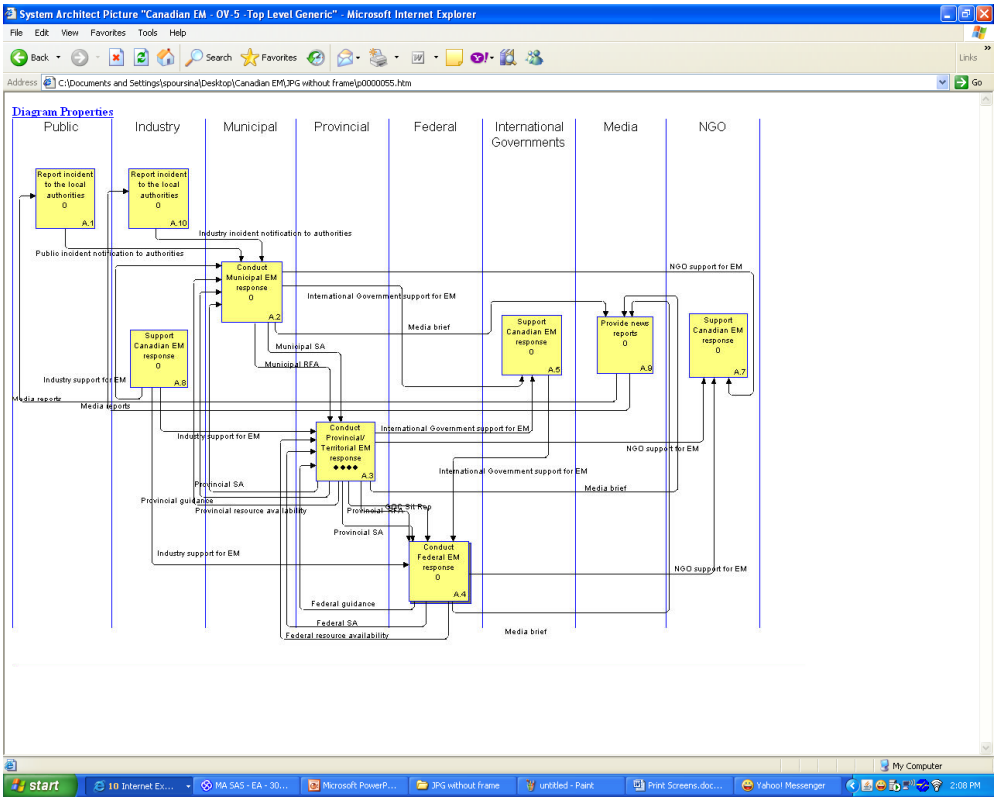


Figure 54 Canadian EM –OV-5 – Top Level Generic Diagram

2. An OV-5 shows links to parent and child operational activities similar to the OV-2 parent and child operational nodes. However, in an OV-5, the activities which are linked to child activities are denoted by a shaded activity box (Figure 39).

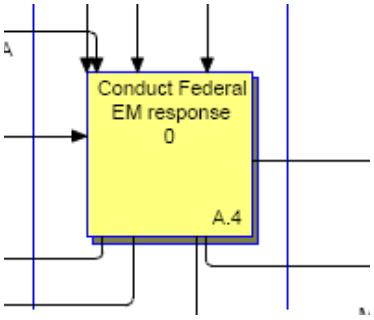


Figure 55 OV-5 Shaded Activity Denoting Link to Child Activity Diagram

3. In Figure 39, each square represents an activity, i.e., “Conduct Federal EM Response”.

4. By clicking on an activity, details regarding this activity will appear in a new page that will ‘pop-up’. This textual detail of the activity includes hyperlinks to any child diagrams[23] and reference documents (Figure 52):

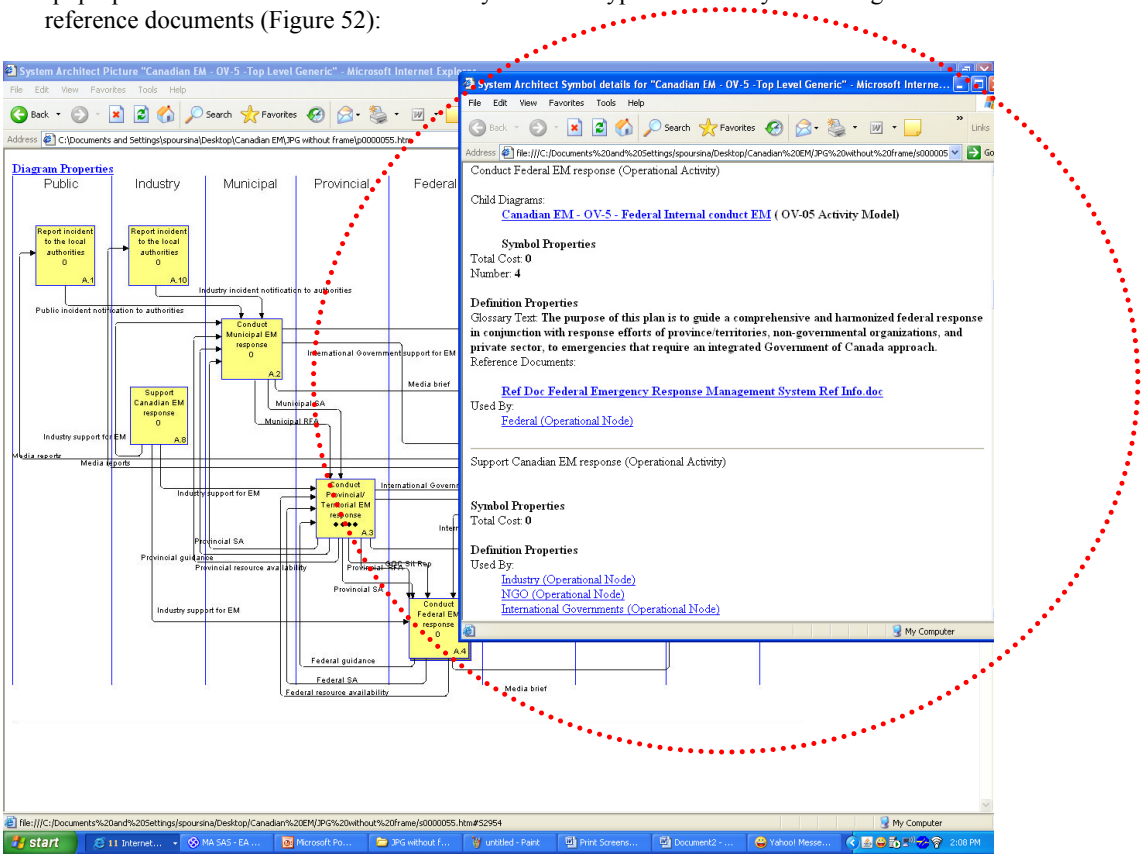


Figure 56 Specific Activity Detail Displayed in New “Pop-up” Page

a) By clicking on the child diagram title you will be taken to the child diagram (i.e. Federal Internal Conduct EM) (Figure 53):

[23] Please note that in the OV-5 there is no direct link to the child diagram via the “3-dot” symbol that we saw for OV-2 diagrams

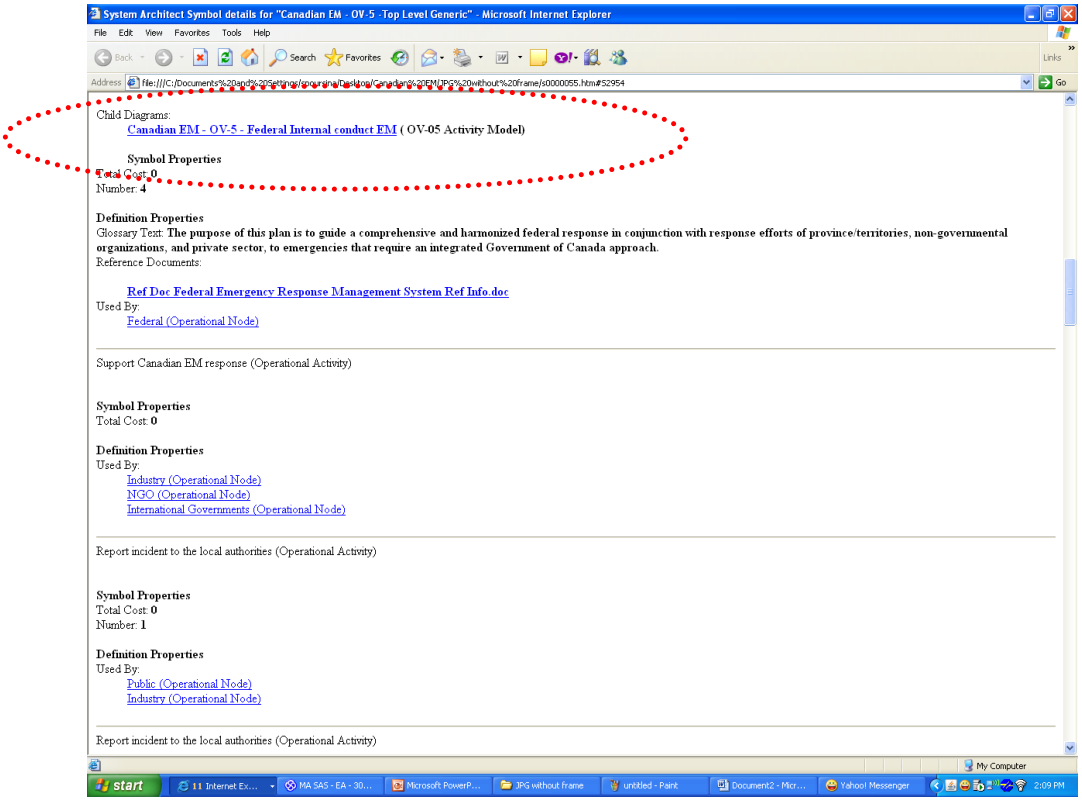


Figure 57 Hyperlink to Child Diagram

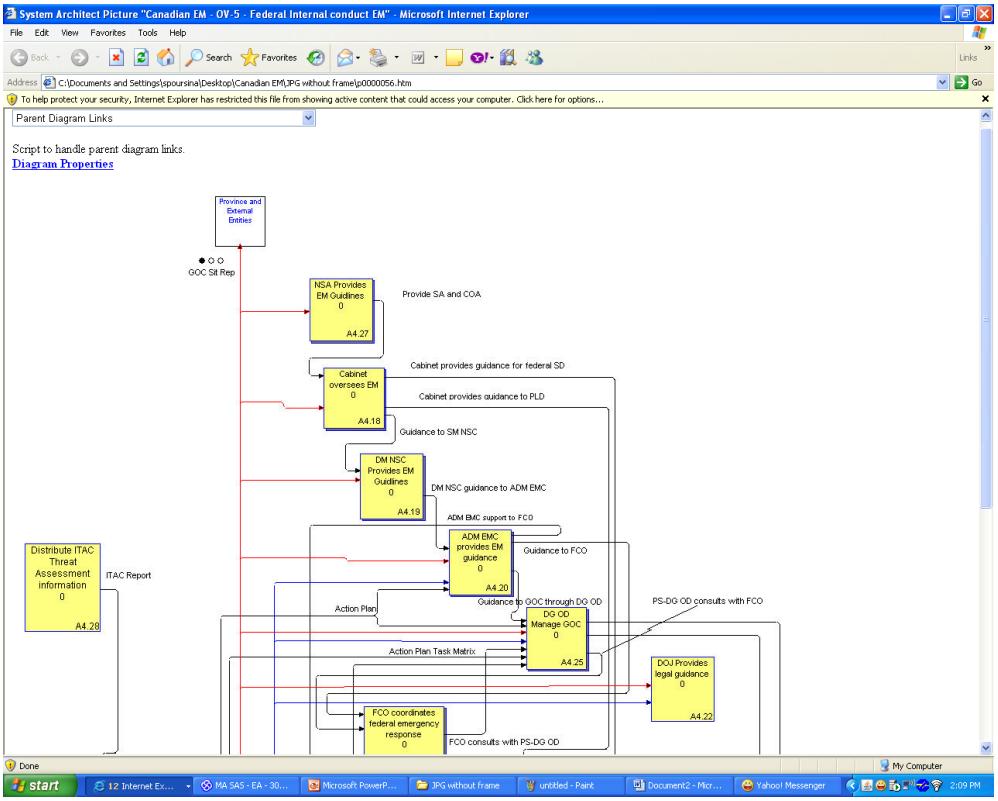


Figure 58 Canadian EM – OV-5 – Federal Internal Conduct EM Diagram

5. Both Activity Models and Node Trees have been developed for the OV-5 product. The title of the diagram denotes the type of diagram. For example in the diagram "Canadian EM – OV-5 – Federal Internal Conduct EM (OV-5 – Activity Model)", the "GOC Facilitate EM" activity has two child diagrams, *"Canadian EM – OV-5 – GOC Facilitate EM (OV-5* ***Activity Model)****"* and *"Canadian EM – OV-5 – GOC Facilitate EM (OV-5 –* ***Node Tree****)":*

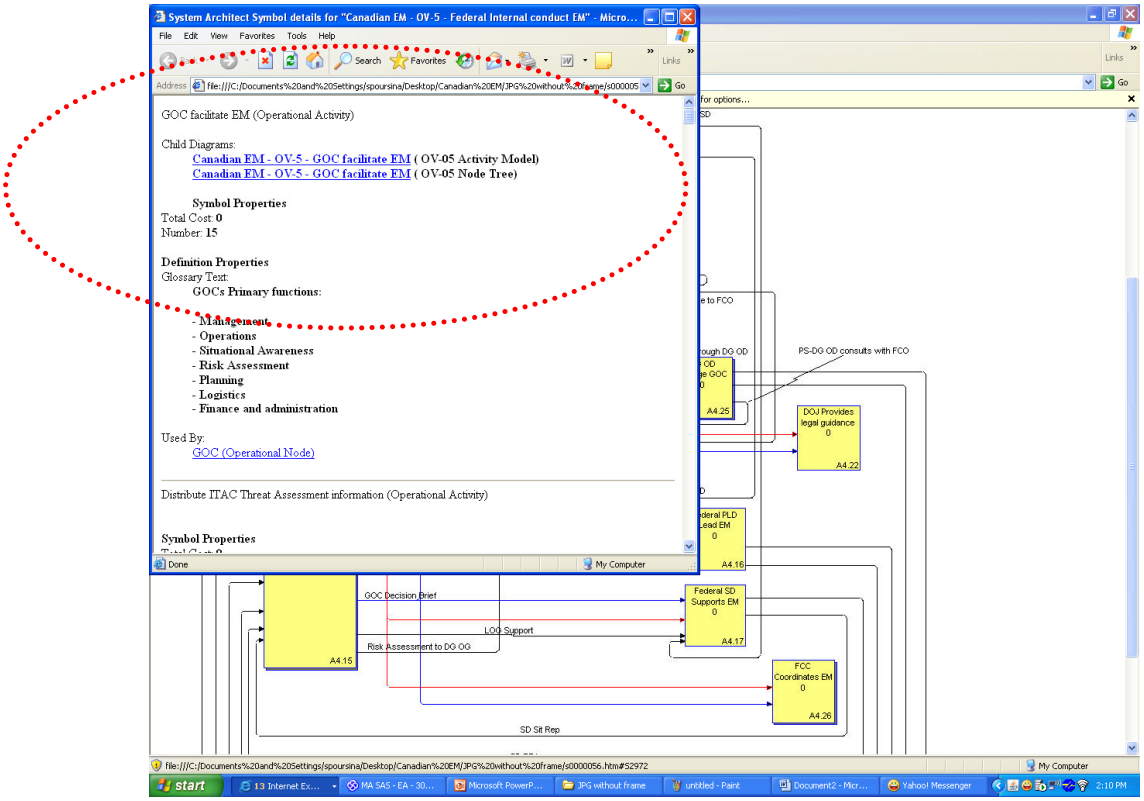


Figure 59 Canadian EM – OV-5 – Federal Internal Conduct EM Illustrating Child Diagram Detail

6. OV-5 Information exchange entities are shown as inputs and outputs to the activities. Situation Reports (SitReps) and Decision Briefs are colour-coded to ease the visual. SitReps are colour-coded red and Decision Briefs are colour-coded blue.

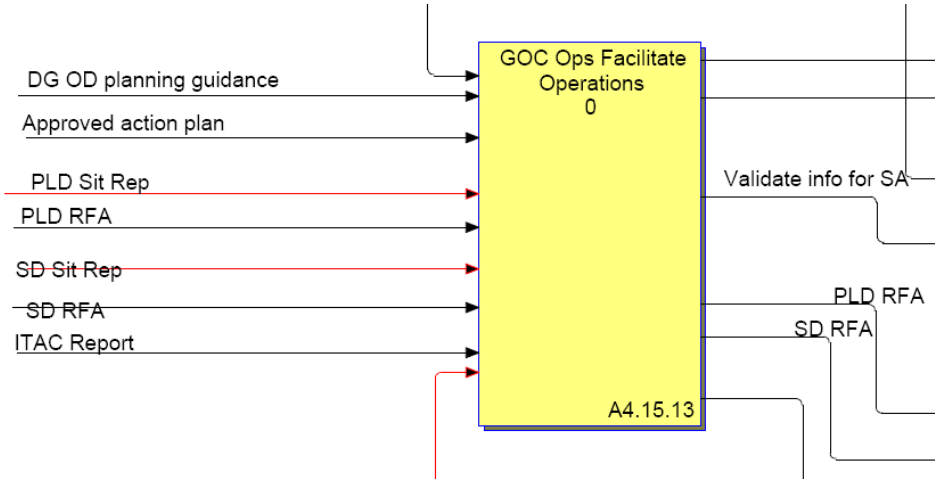


Figure 60Information Exchanges as Activity Inputs and Outputs

G.4 OV-5 - Viewing (TCL based diagrams)

The following steps are applicable for viewing any of the OV-5 diagrams listed on the "Canadian EM.htm" home page that are based on the TCL. These diagrams can be recognised by their title - their titles start with the name "Response C#…" There are 21 Response Capabilities and the titles reflect their number 1 to 21 as follows:

1. On-site Incident Management
2. Emergency Operations Centre Management
3. Critical Resource Logistics and Distribution
4. Volunteer Management and Donations
5. Responder Safety and Health
6. Emergency Public Safety and Security
7. Animal Disease Emergency Support
8. Environmental Health
9. Explosive Device Response Operations
10. Fire Incident Response Support
11. WMD and Hazardous Material Response and Decontamination

12. Citizen Evacuation and Shelter-In-Place

13. Isolation and Quarantine

14. Search and Rescue (Land Based)

15. Emergency Public Information and Warning

16. Emergency Triage and Pre-Hospital Treatment

17. Medical Surge Capability

18. Medical Supplies Management and Distribution

19. Mass Prophylaxis

20. Mass Care

21. Fatality Management

Response C0 represents "Response Capability 0", the top level diagram illustrating all response capabilities.

1. To view an OV-5 diagram that is based on the TCL, choose a OV-5 diagram from an index on the home page:

    a) For example click on "**Response C0 - OV-5 - Respond Mission Area Target Capabilities Top Level (OV-05 Activity Model)**"

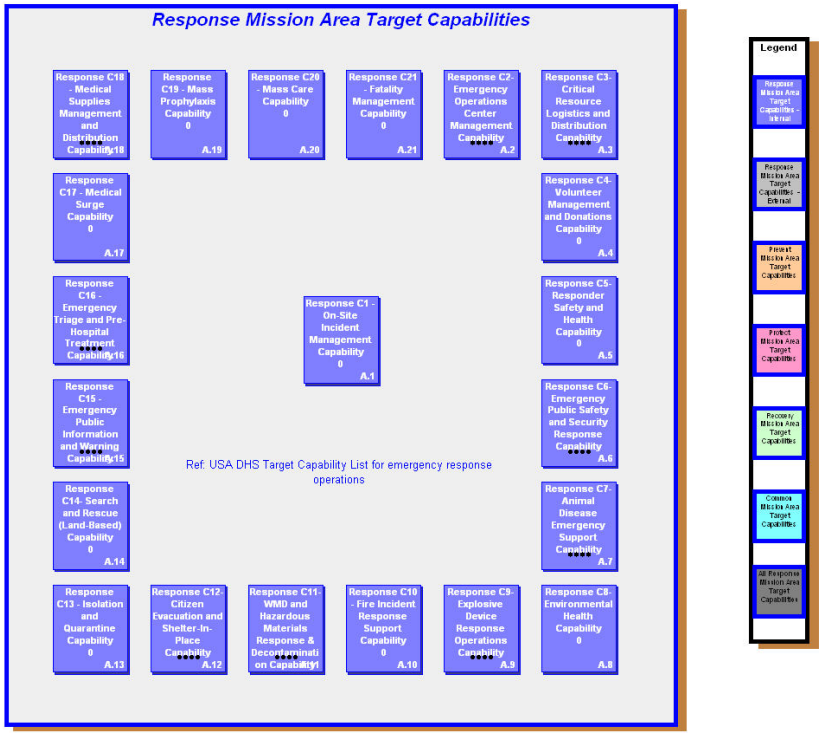


Figure 61 Respond Mission Area Target Capabilities Top Level (OV-05 Activity Model)

b) The legend on the right side of the diagram provides the colour coded legend information.

c) An OV-5 shows links to parent and child operational activities similar to the OV-2 parent and child operational nodes. However, in an OV-5, the activities which are linked to child activities are denoted by a shaded activity box (Figure 58).

Figure 62 OV-5 Shaded Activity Denoting Link to Child Activity Diagram

2. In Figure 39, each square represents one capability in the response mission area of the TCL. To view the details of a specific activity box, click on the activity box, i.e., the "Response C1 – On-Site Incident Management Capability":

    a) This will open up another page that will have the textual detail of that activity (Figure 41) including hyperlinks to any child diagrams[24] and reference documents. Once on the new page, you may browse through all the details related to this capability including description and reference document and access links to child diagrams:

[24] Please note that in the OV-5 there is no direct link to the child diagram via the "3-dot" symbol that we saw for OV-2 diagrams

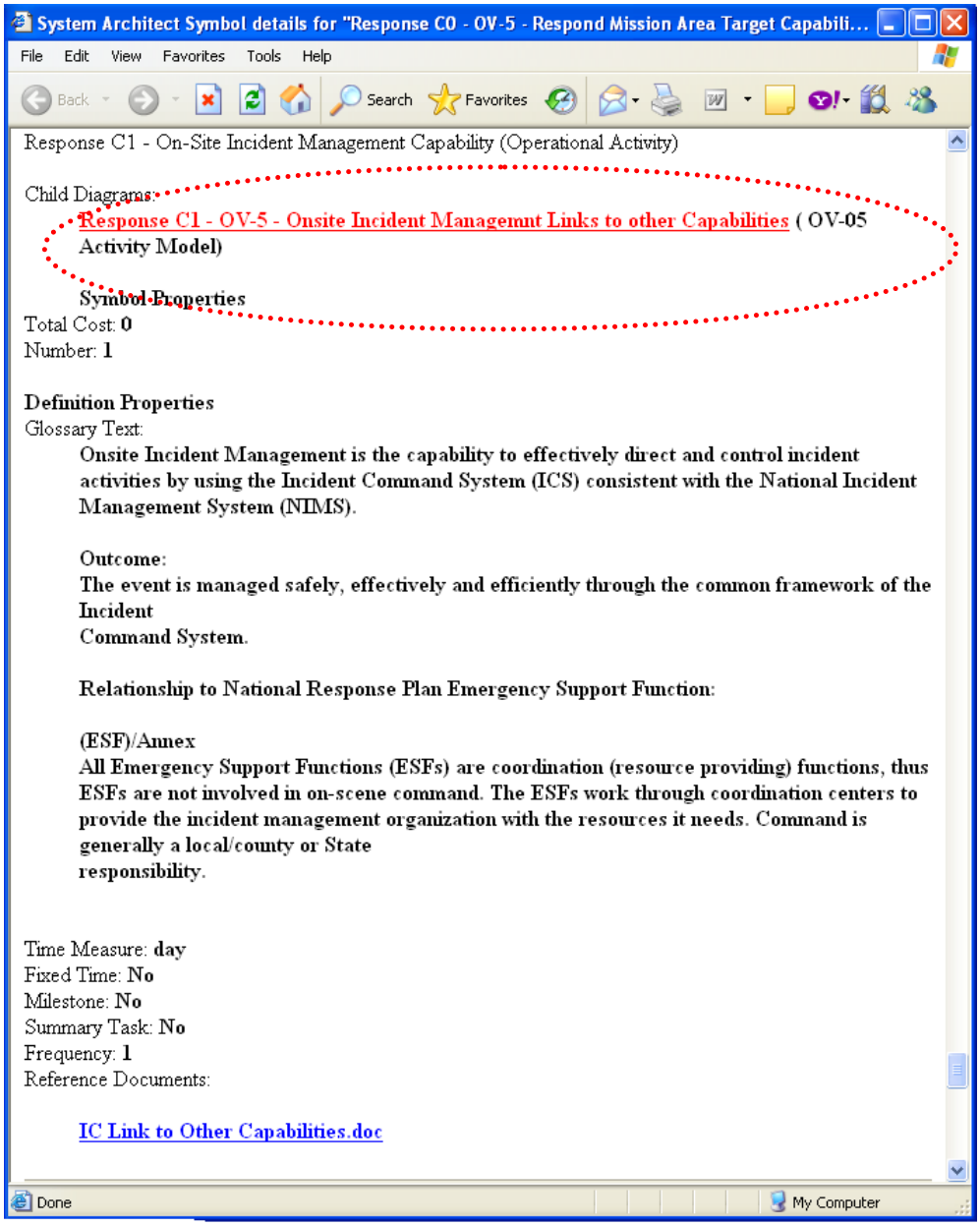


Figure 63 Response C1 - On-Site Incident Management Capability Details

b) By clicking on the child diagram title you will be taken to the child diagram (i.e. Response C1 - On-Site Incident Management Capability (Figure 42):

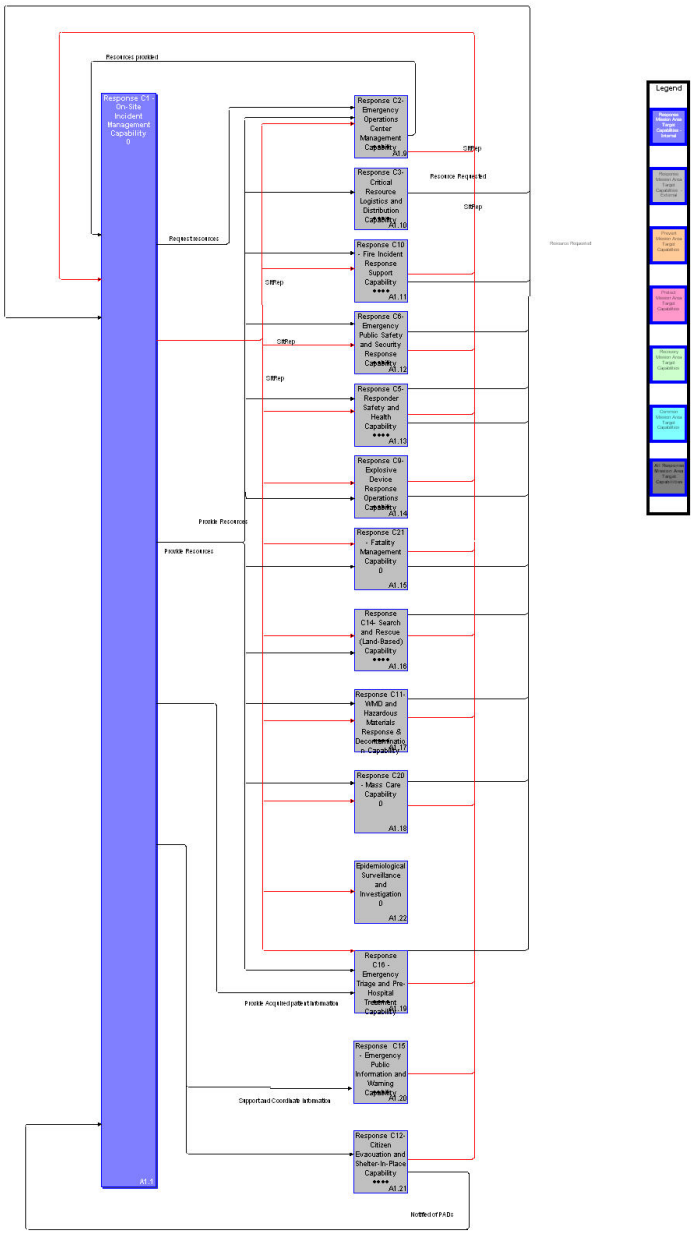


Figure 64 On-Site Incident Command Response Capability Links toOother Capabilities

3. Note that in the OV-5 diagrams developed using the TCL, the top level diagrams represent the capabilities. Lower level child diagrams detail the activities required to deliver the capability. For example, to view the activity process flow diagram for the "On-Site Incident Command Response Capability Links to Other Capabilities" diagram presented above, click on the internal capability coloured in blue. This will open the text detail in a new "pop-up" page from which you can click on the child diagram link to see the diagram below:

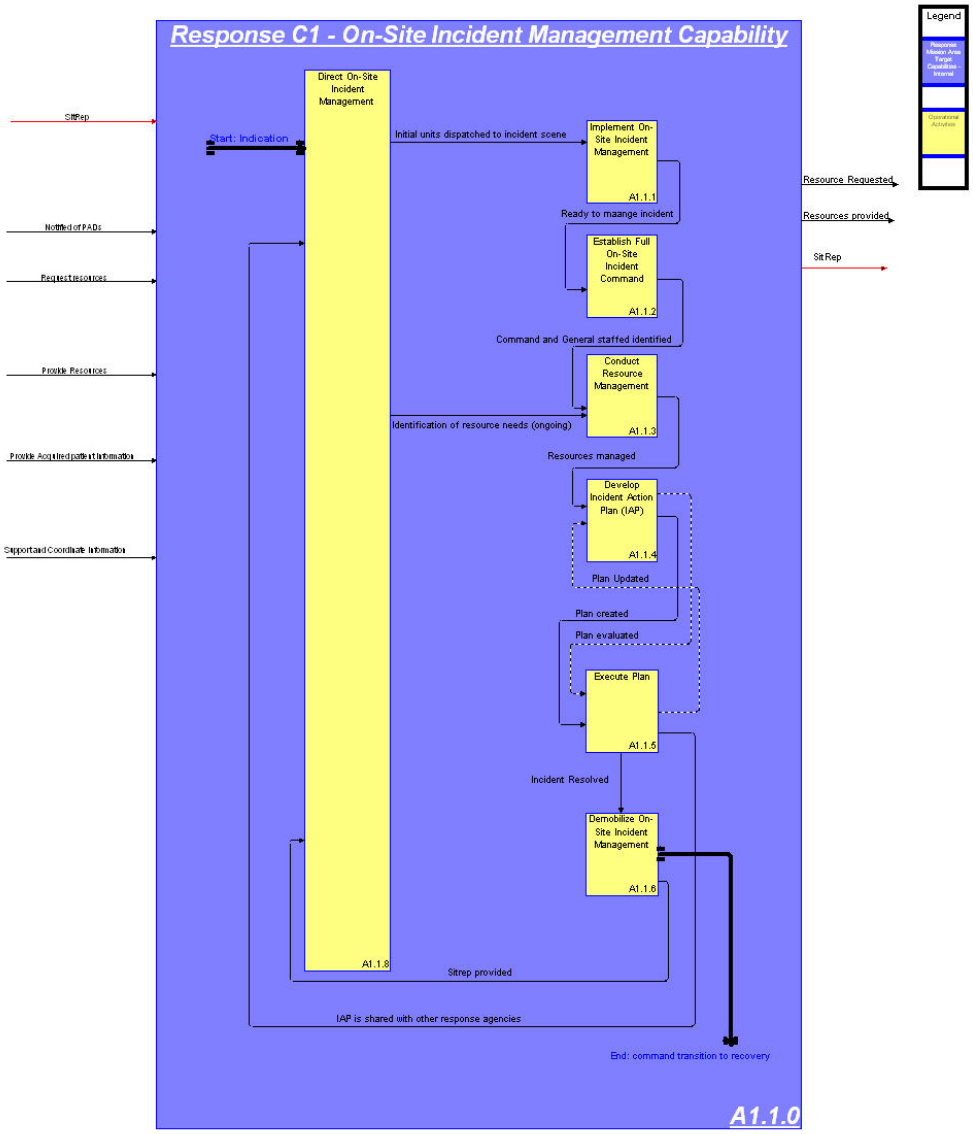


Figure 65 Response C1 - On-Site Incident Management Capability Activity Process Flow Diagram

4. The above diagram illustrates the activity process flow diagram for On-Site Incident Management. The characteristics of the TCL based diagrams include:

a) Each yellow rectangle depicts the operational activity performed within this capability.

b) Each diagram denotes an operational flow start and end point.

c) More detail about each activity can be obtained by clicking on and activity and then referring to the "pop-up" page to view its description and any related links.

5. The Technical Authority for this project specifically asked to go one level down for "Response C2 – Emergency Operation Management Capability" to create "Critical Tasks" node tree for each individual activity and attach a reference document, the Operations Performance Matrix, for each individual activity. To view this data, proceed to the Response C2-Emergency Operation Management Capability either by clicking on the activity or via an index from the home page:

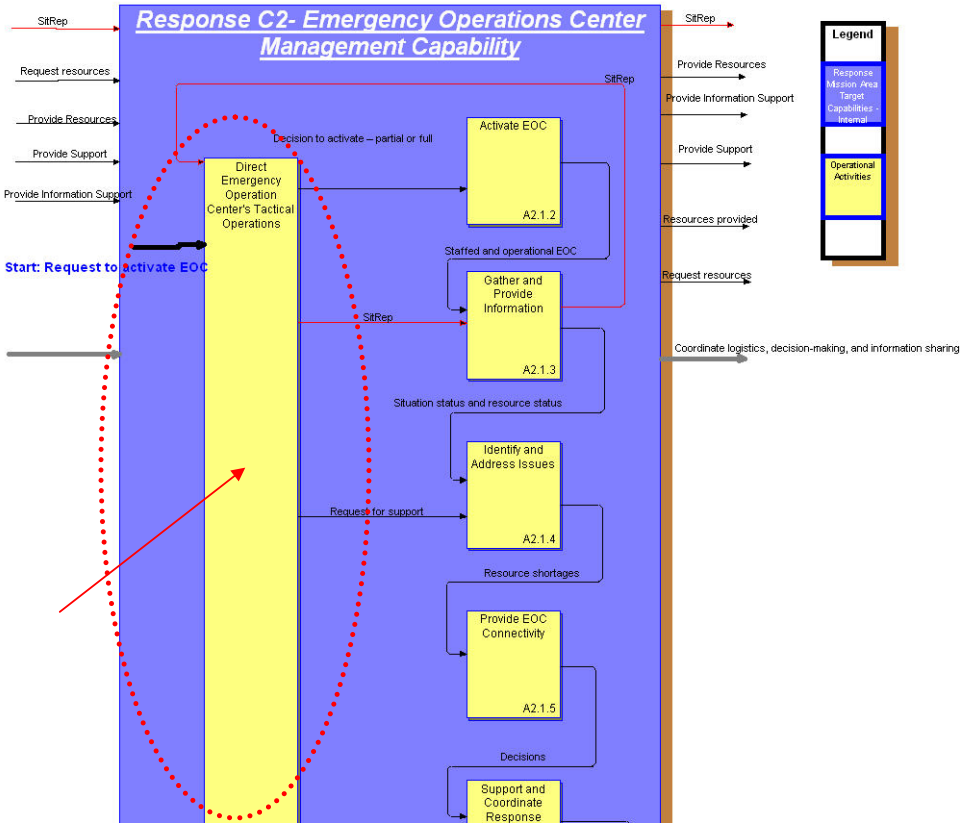


Figure 66 Response C2 – Emergency Operation Management Capability

a) Each one of the activities included in this diagram has child diagrams in the form of node trees developed to document the necessary critical tasks. For example, first click on "Direct Emergency Operation Center (EOC) Tactical Operations" activity (Figure 40) then refer to the bottom right frame and click on the child diagram hyperlink to view the critical tasks node tree associated with this activity

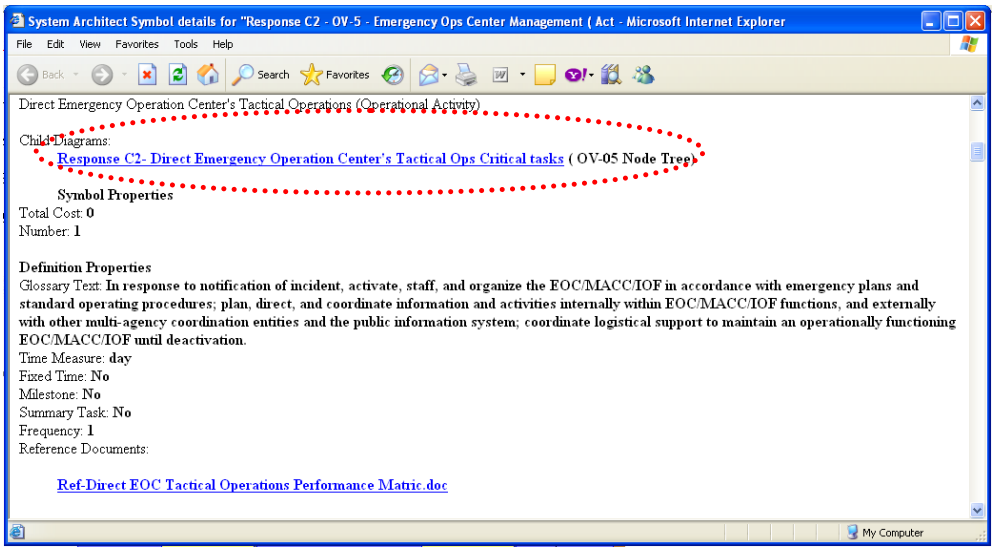


Figure 67 Direct Emergency Operation Center's Tactical Operations Page Detail

b) Click on the child diagram link to see the critical tasks node tree associated with this activity:

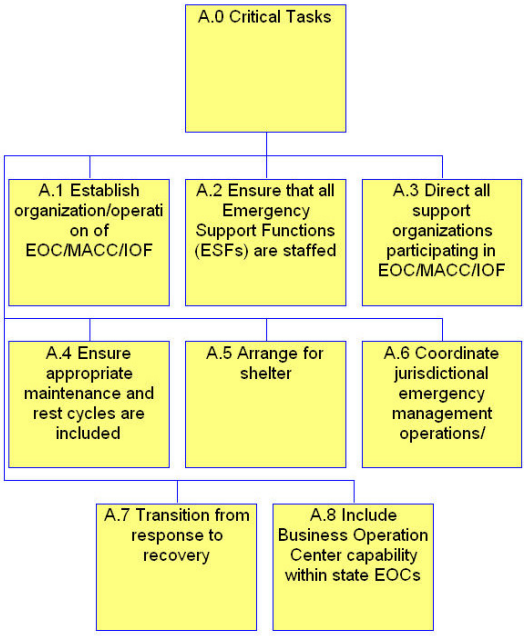


Figure 68 Direct EOC Tactical Ops Critical Tasks Node Tree

c) Click on Reference Document to see the Direct EOC Tactical Performance Matrix

Comment [a1]: How to see this?

Performance Tasks and Measures/Metrics

Activity: *Direct Emergency Operation Center's Tactical Operations* **Definition: In response to notification of incident, activate, staff, and organize the EOC/MACC/IOF in accordance with emergency plans and standard operating procedures; plan, direct, and coordinate information and activities internally within EOC/MACC/IOF functions, and externally with other multi-agency coordination entities and the public information system; coordinate logistical support to maintain an operationally functioning EOC/MACC/IOF until deactivation.**	
Critical Tasks	
Res.B1c 3.1	Establish organization/operation of EOC/MACC/IOF
Res.B1c 3.1.1	Ensure that all Emergency Support Functions (ESFs) are staffed
Res.B1c 3.3.3	Direct all support organizations participating in EOC/MACC/IOF
Res.B1c 3.1.3	Ensure appropriate maintenance and rest cycles are included in resource (personnel and equipment) management activities
Res.B1c 3.5.3.1	Arrange for shelter, housing, and feeding for responders and personnel supporting the operation per the emergency plan, as applicable
Res.B1c 3.5.3.2	Arrange for shelter, housing, and feeding for displaced responder families and general population
Res.B1c 3.3.1	Coordinate jurisdictional emergency management operations
Res.B1c 3.7	Transition from response to recovery
Res.B1c 3.7.1	Include Business Operation Center capability within state EOCs

Performance Measures	**Metric**
The emergency operations center (EOC) is activated upon notification of the incident	Yes/No
The emergency operations center (EOC/MACC/IOF) was activated upon notification of the incident	Yes/No
EOC/MACC/IOF is appropriately staffed to meet incident demands	Yes/No

Figure 69 Performance Tasks and Measure/Metrics

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Bibliography

Canadian Forces Experiment Centre (2006). Capability Engineering Based CF-OGD Interactions Model For Major Event Security Operations, Project Report. Prepared by CAE Professional Services and Lansdowne Technologies Inc.

Department of Homeland Security (2005). Target Capability List, Version 1.1, Washington DC.

Joint Command Decision Support for the Twenty First Century (2006). Modelling Joint Staff Business Processes For Domestic Operations, Project Report. Prepared by CAE Professional Services and Lansdowne Technologies Inc.

Public Safety Canada. (2008) Federal Emergency Response Management System, February 2008.

US Department of Defense. (2004). DoD Architecture Framework, Version 1.0, Deskbook, Washington, DC.

US Department of Defense. (2004). DoD Architecture Framework, Version 1.0, Volume I – Definitions and Guidelines, Washington, DC.

US Department of Defense. (2004). DoD Architecture Framework, Version 1.0, Volume II – Product Description, Washington, DC.

Supplementary Reading Bibliography

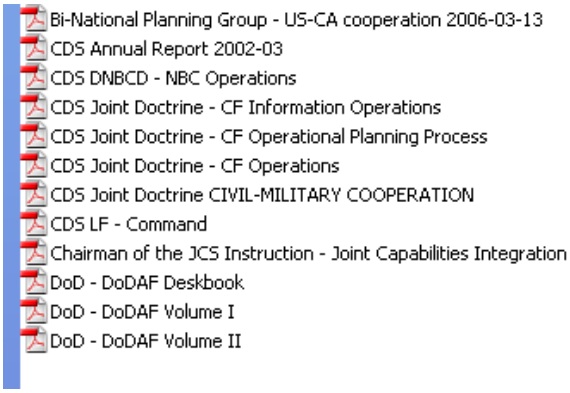
Leveraging the work of JCDS21 and CFEC included access to soft copies of their literature search results. This section presents a list of soft copies of documents that were provided to PSTP with this report. The documents were augmented with the literature search results conducted for this project.

The documents have been organised under the following sub-headings:

1. CF Civil-Military Literature
2. EM Literature
3. ERPs Federal
4. ERPs Industry
5. ERPs Municipal
6. ERPs Provincial
7. NATO
8. UN
9. US
10. WHO

A print screen of each of the folders and the documents they contain is included below:

CF Civil-Military Literature

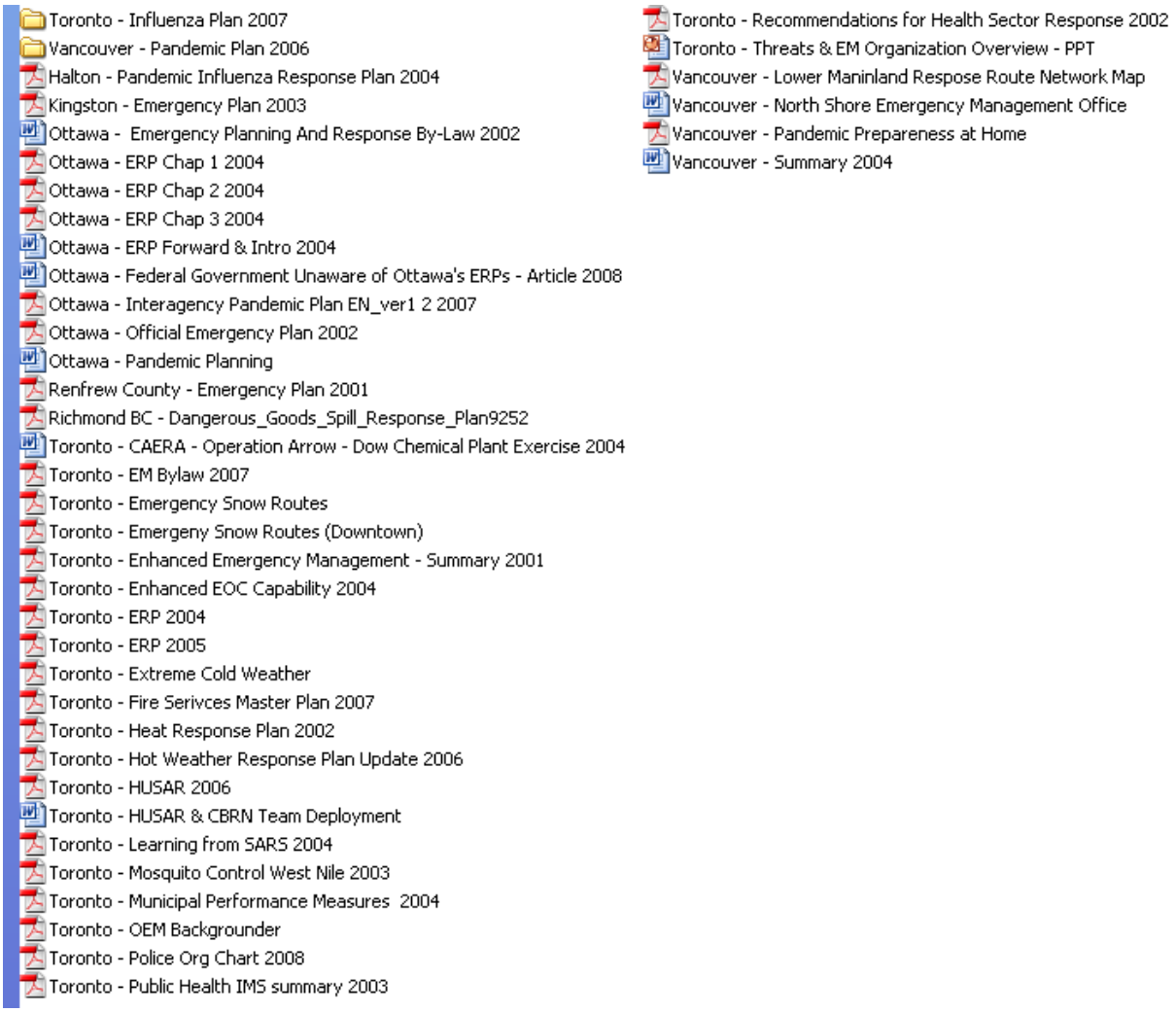


EM Literature

ERPs Federal

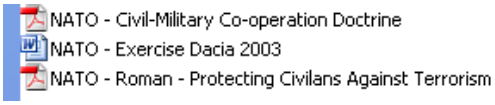
ERPs Industry

ERPs Municipal

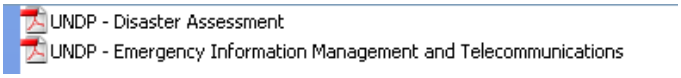


ERPs Provincial

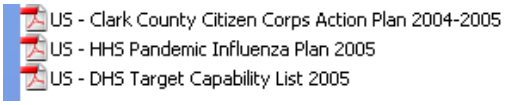
NATO



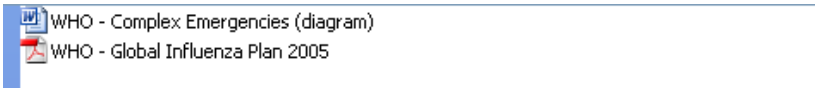
UN


UNDP - Disaster Assessment
UNDP - Emergency Information Management and Telecommunications

US


US - Clark County Citizen Corps Action Plan 2004-2005
US - HHS Pandemic Influenza Plan 2005
US - DHS Target Capability List 2005

WHO


WHO - Complex Emergencies (diagram)
WHO - Global Influenza Plan 2005

List of symbols/abbreviations/acronyms/initialisms

This section contains the list of symbols/abbreviations/acronyms/initialisms used in this report. The Glossary-AV-2 in the following section contains the definitions of terms/acronyms used in the architecture products.

AV	All View
C&S	Command and Sense (see CFEC)
C2	Command & Control
CAE PS	CAE Professional Services
Canada Com	Canada Command
CBP	Capability based planning
CBRNE	Chemical, Biological, Radiological, Nuclear and Explosive
CF	Canadian Forces
CFEC	Canadian Forces Experimental Centre
CIP	Critical Infrastructure Protection
COPs	Common Operating Procedures
CRTI	Chemical, Biological, Radiological-Nuclear, and Explosives (CBRNE) Research and Technology Initiative
CSS	Centre for Security Sciences
DHS	Department of Homeland Security (USA)
DND	Department of National Defence
DoDAF	Department of Defense Architecture Framework
DRDC	Defence Research & Development Canada
EA	Enterprise Architectures
EM	Emergency Management
EMSI	Emergency Management & Systems Integration
EOC	Emergency Operation Centres
ERPs	Emergency Response Plans
FERP	Federal Emergency Response Plan
GOC	Government of Canada Operations Centre
HR	Human Resources
HSPD	Homeland Security Presidential Directive (USA)
HTML	HyperText Markup Language

HV	Human View
I/O	Input and Output
IC	Industry Canada
IEEE	Institute of Electrical and Electronics Engineers
JCDS21	Joint Command Decision Support for the 21st Century
JPEG	A commonly used method of compression for photographic images named after the Joint Photographers Expert Group
M&S	Modelling and simulation
MAA	Mutual Aid Agreements
MEOps	Major Event Operations
MOU	Memorandum of Understanding
NDCC	National Defence Command Centre
NIMS	National Incident Management System
OE	Operational Elements (see DoDAF)
OGD	Other Government Department
OR	Operational Research
OV	Operational View
PARRI	Persistence, Agility, Range , Reach, Information (a metrics framework)
PS Canada	Public Safety Canada
PSAF	Public Safety Architecture Framework
PSTP	Public Security Technical Program
R&D	Research & Development
RCMP	Royal Canadian Mounted Police
RCMP	Royal Canadian Mounted Police
S&T	Science and Technology
SA	System Architecture
SA	Situational Awareness
SII	Security, Intelligence and Interdiction
SOP	Standard Operating Procedure
SoS	System-of-Systems
SPP	Security and Prosperity Partnership Agreement
SV	System View
SVG	Scalable Vector Graphics
TBS	Treasury Board Secretariat

TC	Transport Canada
TCL	Target Capability List
TV	Technical View
US	United States (see also USA)
USA	United States of America

Glossary – AV-2

The All Views 2 (AV-2) Integrated Dictionary contains the definitions of the terms used in all of the architecture products created for a project.

The AV-2 created for this project is an output of the data elements captured in the SA database. It lists the name, description and data element type for each entry in the SA database. At the time of report completion, the database is not fully developed. This is due to two reasons: (1) the database will be maintained as a work in progress and the data elements that were entered but not used in the architecture were not fully defined, and (2) funds for this project were not sufficient to ensure that every data element entry was complete (this is a desired end state and it is hoped that this will be completed in the near future).

Name	Description	Type
Acquire Resources	Request and acquire resources from local, State, Federal, or private providers.	Operational Activity
Act as GOC - PCO		Operational Activity
Act as primary point of contact for federal departments		Operational Activity
Act as primary point of contact for NGOs, international partners		Operational Activity
Act as primary point of contact for provinces/territories		Operational Activity
Activate Animal Disease Emergency Support	In response to a notification of animal disease, respond, mobilize, and arrive on scene to begin emergency veterinary operations	Operational Activity
Activate Critical Resource Logistics and Distribution	In response to activation, initiate the resource logistics and distribution process, including identifying and establishing a logistics staging area (LSA)	Operational Activity
Activate Emergency Public Information, Alert/Warning, and Notification Plans	Activate key personnel, facilities, and procedures	Operational Activity
Activate Environment Health	Identify required experts and mobilizes personnel to begin environmental health assessments and response activities	Operational Activity
Activate EOC	In response to activation, perform incident notifications, recall of essential personnel, and stand-up of EOC/MACC/IOF systems to provide a fully staffed and operational EOC.	Operational Activity
Activate Evacuation and/or In-Place Protection	In response to activation, identify and ensure notification of at-risk populations, and identify populations requiring assistance in evacuation and/or in-place protection	Operational Activity
Activate Fatality Management Operations	Notify and mobilize appropriate personnel	Operational Activity
Activate Fire Incident Response Support	Receive alarm signal and respond to incident site	Operational Activity
Activate Isolation and Quarantine	Initiate plan and mobilize healthcare and security personnel and resources to contain a communicable disease outbreak	Operational Activity
Activate Level 1 -		Operational

coordinate response to minor emergencies		Activity
Activate Level 2 - minor staffing and lead/support LOs and SMEs		Operational Activity
Activate Level 2 - partial augmentation by prime/support LOs and SMEs		Operational Activity
Activate Level 3 - extensive augmentation with prime/support LOs and SMEs		Operational Activity
Activate Level 3 - extensive staffing and lead/support LOs and SMEs		Operational Activity
Activate Mass Care	Activate and mobilize mass care personnel and resources	Operational Activity
Activate Mass Prophylaxis Dispensing Operations	Upon notification, activate points of dispensing for mass prophylaxis operation	Operational Activity
Activate Medical Supplies Management and Distribution	Upon identification of medical resource shortfalls and/or SNS deployment, activate warehousing operations	Operational Activity
Activate Medical Surge	In response to a mass casualty incident, activate medical surge through implementation of surge plan	Operational Activity
Activate Public Safety and Security Response	Upon notification, mobilize and deploy to begin operations	Operational Activity
Activate Public Safety Bomb Squad	In response to activation, mobilize and arrive at the incident scene to begin operations	Operational Activity
Activate Responder Safety and Health	In response to Incident Command (IC) recognition of the complexity of hazards in the incident, mobilize and designate Safety Officer to begin operations or continue IC-initiated operations	Operational Activity
Activate role at GOC Level 3		Operational Activity
Activate Search & Rescue	In response to notification, mobilize and arrive at the incident scene to begin operations	Operational Activity
Activate Triage and Pre-Hospital Treatment	In response to a notification, respond, mobilize, and arrive on scene to begin emergency medical operations	Operational Activity
Activate Volunteer Management and Donations Emergency Plan	In response to an incident, mobilize personnel and facilities to begin processing offers of assistance.	Operational Activity
Activate WMD and Hazardous Material Response and Decontamination	In response to activation, mobilize and arrive at the incident scene to begin operations.	Operational Activity
Activate, alert, and request response from EOC/MACC/IOF personnel		Operational Activity
ADM EMC	Assistant Deputy Ministers' Emergency Management Committee Co-Chaired by ADM PSC adn Asst Secretary to the Cabinet for the PCO	Operational Node

	Non-emergency = provides forum to discuss the Government of Canada's EM processes and readiness	
ADM EMC --> DG OD	Assistant Deputy Ministers' Emergency Management Committee to Public Safety Canada Director General Operations Directorate interface	Need Line
ADM EMC --> DM NSC	Assistant Deputy Ministers' Emergency Management Committee to Deputy Ministers' National Security Committee interface	Need Line
ADM EMC --> DM NSC		Need Line
ADM EMC --> FCO		Need Line
ADM EMC --> GOC	Assistant Deputy Ministers' Emergency management Committee to GOC interface	Need Line
ADM EMC --> PS Canada	Assistant Deputy Minsters' Emergency Management Committee to Public Safety Canada interface	Need Line
ADM EMC --> PS Canada		Need Line
ADM EMC provides EM guidance		Operational Activity
ADM EMC receives GOC SA Products		Operational Activity
Advise senior officials on the public environment		Operational Activity
Agriculture & Agri-Food Canada		Operational Node
All Response Capability Areas		Operational Activity
Approves COAs for consideration by ministers		Operational Activity
Approves COAs to Cabinet OC		Operational Activity
Approves DM briefings		Operational Activity
Arrange for shelter	Arrange for shelter, housing, and feeding for responders and personnel supporting the operation, per the emergency plan, as applicable	Operational Activity
Assess Hazard and Evaluate Risk	Assess the hazards present, evaluate the level of risk to both responders and the public, and develop and Incident Action Plan (IAP) to address the response problem	Operational Activity
Assess Municipal Threat		Operational Activity
Assess National Threat		Operational Activity
Assess Provincial Threat		Operational Activity
Assess Provincial Threat/COAs		Operational Activity
Assess the Incident Scene and Secure the Area	Upon arriving on scene, assess for immediate rescue needs, for remaining safety and security threats, and initiate security operations. Identify and implement protective actions for high priority key facilities or resources that may require heightened security.	Operational Activity
Assign responsibilities to Cabinet Committee on Foregin Affairs and Security		Operational Activity
Assist primary lead and support departments		Operational Activity
Assist Re-Entry	Upon notification of the affected area being safe, assist in-shelter population and/or evacuees in re-entering area	Operational Activity

BC	Operational Node
BC - Ad Hoc Committee of the Cabinet	Operational Node
BC - Central Coordination Group	Operational Node
BC - IEPC	Operational Node
BC - Ministries & Crown Corporations	Operational Node
BC - PECC	Operational Node
BC - PECC - Director	Operational Node
BC - PECC - ECC	Operational Node
BC - PECC - Finance/Administration Section	Operational Node
BC - PECC - Information Section	Operational Node
BC - PECC - LO - DND RJTF	Operational Node
BC - PECC - LO - Regional PS	Operational Node
BC - PECC - Logistics Section	Operational Node
BC - PECC - Operations Section	Operational Node
BC - PECC - Planning Section	Operational Node
BC - PECC - Teams Liaison Officer	Operational Node
BC - Premier	Operational Node
BC - PREOC	Operational Node
BC - PREOC - Director	Operational Node
BC - PREOC - Finance/Administration Section	Operational Node
BC - PREOC - Information Section	Operational Node
BC - PREOC - LO - DND RJTF	Operational Node
BC - PREOC - LO - Generic	Operational Node
BC - PREOC - LO - Municipal EOC	Operational Node
BC - PREOC - LO - PECC	Operational Node
BC - PREOC - Logistics	Operational

Section	Node
BC - PREOC - MROC	Operational Node
BC - PREOC - Operations Section	Operational Node
BC - PREOC - Planning Section	Operational Node
BC - Provincial Site Support Emergency Operations Centre	Operational Node
BC - Public Affairs Bureau	Operational Node
BC - RCMP E Division	Operational Node
BC - RCMP E Division - Commanding Officer	Operational Node
BC - RCMP E Division - Commissioner	Operational Node
BC - RCMP E Division - Communications Offic	Operational Node
BC - RCMP E Division - Criminal Operations Officer	Operational Node
BC - RCMP E Division - DEOC	Operational Node
BC - RCMP E Division - Emergency Response Team	Operational Node
BC - RCMP E Division - Explosive Disposal Unit	Operational Node
BC - RCMP E Division - Incident Commander	Operational Node
BC - Site Response - Planning Section	Operational Node
BC - Site Response - Site Incident Commander	Operational Node
BC - Site Response Command Post	Operational Node
BC - Site Support EOC Director	Operational Node
BC - Site Support Finance/Admin	Operational Node
BC - Site Support Information Officer	Operational Node
BC - Site Support Liaison Officer	Operational Node
BC - Site Support Logistics Planning	Operational Node
BC - Site Support Operations Section	Operational Node
BC - Site Support Planning Section	Operational Node
BC - Site Support Safety	Operational

Officer		Node
Brief incoming personnel		Operational Activity
C0 - Response Mission areas Top Level	The Target Capabilities List provides a guide to addressing the priorities and achieving the National Preparedness Guidelines. Capabilities provide the means to accomplish a mission and achieve desired outcomes by performing critical tasks, under specified conditions, to target levels of performance. Capabilities are delivered by appropriate combinations of planning, organization, equipment, training, and exercises. The TCL supports an all-hazards approach to building capabilities that may be needed in the event of terrorist attacks, natural disasters, health emergencies, and other major events. It identifies 37 capabilities that were developed with the active participation of stakeholders representing all levels of government, non-governmental organizations, and the private sector.	Operational Activity
C18 - Medical Supplies Management and Distribution		Operational Activity
Cabinet	A council of ministers of the Crown chaired by the Prime Minister, the Cabinet is the executive committee of the Canadian government. Cabinet itself (or full Cabinet) is further divided into committees. For the purposes of emergency management, the Cabinet Operations Committee is the lead body. During an emergency this committee can be chaired by the Prime Minister and performs the following actions: - oversees the Government of Canada's response to a domestic emergency - provides direction to senior officials and - may assign some or all of its responsibilities concerning a domestic emergency to the Cabinet Committee on Foreign Affairs and Security.	Operational Node
Cabinet --> DM NSC	Cabinet to Deputy Ministers' National Security Committee interface	Need Line
Cabinet --> Federal - PLD	Cabinet to Federal Primary Lead Department interface	Need Line
Cabinet --> Federal - SD	Cabinet to Federal Supporting Department	Need Line
Cabinet --> PM	Cabinet to Prime Minister interface	Need Line
Cabinet CFAS	Cabinet Committee on Foreign Affairs and Security	Operational Node
Cabinet OC	Cabinet Operations Committee Non-Emergencies - Chaired by IC Minister - provides day-to-day coordination of government agenda, including issues management, legislation and house planning and communications. Emergency - Chaired by PM	Operational Node
Cabinet oversees EM		Operational Activity
Cabinet provides direction to senior officials		Operational Activity
Call 911	General Public calls 911 to report and emergency to local authorities.	Operational Activity
CanadaCom		Operational Node
CanadaCom - Commander		Operational Node
CanadaCom - JCC	DND Joint Command Centre	Operational Node
CanadaCom - OGD LO		Operational Node
Canadian Nuclear Safety Commission		Operational Node

CANOSCOM		Operational Node
CANOSCOM Operational Support Command Centre (OSCC)		Operational Node
CBSA		Operational Node
CEFCOM		Operational Node
CEFCOM - DART Disaster Assistance Response Team		Operational Node
Chair PS - Regional Federal Coordination Group		Operational Activity
Chair PS - Regional Federal Coordination Steering Committee		Operational Activity
CIDA		Operational Node
Close Shelter	Deactivate shelter and staff upon determination that immediate shelter needs have been met or if the shelter is no longer suitable to meet mission needs	Operational Activity
Collect and Evacuate Population Requiring Assistance	Upon identification of individuals requiring assistance and type of assistance required, collect and move individuals to established evacuation staging/reception area for further services	Operational Activity
Collect and Manage Cash Donations	Once activated, refer cash donations to appropriate voluntary organizations.	Operational Activity
Collect and Manage Material Donations	Once activated, receive and manage unsolicited in-kind donations.	Operational Activity
Collect, analyze, and disseminate information and intelligence		Operational Activity
Command and Control Public Safety and Security Response Operations	In response to a notification for security assets, establish the management and coordination of the Public Safety and Security Response, from activation through to demobilization	Operational Activity
Communicate information to decision-makers through SA product-Decision Brief		Operational Activity
Communicate RA information to decision makers		Operational Activity
Communicate RFA to Federal SD EOC		Operational Activity
Communications		Operational Activity
Community Preparedness and Participation		Operational Activity
Conduct Animal Health Epidemiological Investigation & Surveillance	Conduct investigations and surveillance of animal populations to determine the sources of an animal disease outbreak, the potentially infected animal populations, and verify the elimination of the disease.	Operational Activity
Conduct Bulk Distribution	After establishing bulk distribution operations, distribute items to the affected	Operational

Operations	population	Activity
Conduct Cause and Origin	Conduct on-site investigation to determine origin of fire and possible cause	Operational Activity
Conduct Decontamination and Clean-up /Recovery Operations	Upon arrival on scene and with the requisite equipment, initiate response operations to reduce the level of on-scene contamination, minimize the potential for secondary contamination beyond the incident scene, and ensure an effective transition to clean-up and recovery operations.	Operational Activity
Conduct Euthanasia/Disposal	Provide humane methods to euthanize affected animals to stop the spread of the disease or alleviate suffering and properly dispose of animal remains	Operational Activity
Conduct Federal EM response	The purpose of this plan is to guide a comprehensive and harmonized federal response in conjunction with response efforts of province/territories, non-governmental organizations, and private sector, to emergencies that require an integrated Government of Canada approach.	Operational Activity
Conduct Final Disposition	Return the human remains and personal effects to the families or designated legal authority (ie, ME/C, Sheriff) for final disposition following recovery, decontamination, determination of the cause and manner of death and positive identification	Operational Activity
Conduct impact analysis for CIP		Operational Activity
Conduct Joint Information Center Operations	Upon activation of the JIC, monitor media and conduct press briefings.	Operational Activity
Conduct Law Enforcement Operations	Upon notification or suspicion of criminal activity, identify, and take appropriate enforcement action with lawbreakers at or around the incident site	Operational Activity
Conduct Mass Dispensing	Dispense oral medication/administer vaccination according to standing medical orders	Operational Activity
Conduct Media Relations	Upon activation of the JIC/JIS, monitor media contacts and conduct press briefings	Operational Activity
Conduct Medical Screening	Review patient screening documentation and available medical history to determine proper course of treatment	Operational Activity
Conduct Mitigation Activities	Once on scene and equipped with protective and response equipment, implement operations plan to minimize contamination.	Operational Activity
Conduct Morgue Operations	Store remains temporarily, and conduct multi-specialty forensic analysis of human remains to determine the cause and manner of death	Operational Activity
Conduct Municipal EM response		Operational Activity
Conduct On-scene Fatality Management Operations	Conduct scene evaluation, document, and remove fatalities from scene	Operational Activity
Conduct Overhaul Operations	Locate and extinguish hot spots and hidden fire in void spaces	Operational Activity
Conduct Provincial/ Territorial EM response		Operational Activity
Conduct Recovery, Removal, and Transport Operations	Collect and transport device and/or components for further processing of hazardous elements	Operational Activity
Conduct Rescue Operations	Once on-scene and equipped with protective and response equipment, implement rescue operations.	Operational Activity
Conduct Resource Management	Implement policies and procedures to ensure the provision and tracking of all necessary resources	Operational Activity
Conduct risk analysis		Operational Activity
Conduct Search and Rescue Reconnaissance	Once on scene and equipped, provide rapid assessment of assigned SAR work areas and recommend search priorities/tactics to management	Operational Activity
Conduct Triage for	Conduct initial screening of individuals prior to their entering the POD	Operational

Symptoms		Activity
Conduct Victim Identification	Compile antemortem records of missing individuals and compare those to the repository of postmortem data collected through On-scene and Morgue Operations	Operational Activity
Contain and Control	Upon arrival on scene, engage in fire suppression operations to contain, control, and extinguish fire, initiate search for trapped or endangered victims, remove victims to safe area, and request or provide appropriate medical treatment.	Operational Activity
Control Traffic, Crowd, and Scene	Direct/redirect traffic and pedestrians out of the affected area(s). Assess, coordinate, and establish force protection and perimeter zones, maintain a visible and effective security presence to deter criminal conduct and maintain law and order	Operational Activity
Coordinate activation of mutual aid agreements to obtain resources		Operational Activity
Coordinate between prov/terr EOC and FCC/GOC		Operational Activity
Coordinate Distribution of Donations	Process and disburse goods based on established plan.	Operational Activity
Coordinate emergency management efforts	Coordinate emergency management efforts among local, county, regional, State, and Federal EOC/MACC/IOF	Operational Activity
Coordinate jurisdictional emergency management operations/		Operational Activity
Coordinate legal and regulatory issues with support of general counsel		Operational Activity
Coordinate Management	Activity: Coordinate Volunteer Management Operations and the Establishment of Warehouses and Materials Handling Equipment Definition: In response to citizens, businesses, and corporations spontaneously volunteering and or/donating goods or cash, provide program to manage response plans.	Operational Activity
Coordinate resource logistics and distribution		Operational Activity
Coordinate the implementation of MAA, etc	MAA - Mutual Aid Agreements	Operational Activity
Coordinate the integration of public coms within GOC		Operational Activity
Coordinate the mobilization and deployment of resources		Operational Activity
Coordinate transportation of resources re RFAs	RFA - Request for Assistance	Operational Activity
Coordinate with non-government agencies and/or private sector	Coordinate with non-government agencies and/or private sector to collect/share data on incident situation	Operational Activity
Coordinates and approves COA options to Cabinet OC		Operational Activity
Coordinates and approves		Operational

COA options to DM NSC		Activity
Coordinates COA options to DM NSC		Operational Activity
Coordinates emergency public comms for Govt of Canada between fed govt depts		Operational Activity
Coordinates emergency public coms with international partners		Operational Activity
Coordinates emergency public coms with NGOs		Operational Activity
Coordinates emergency public coms with provinces/territories		Operational Activity
Critical Tasks		Operational Activity
CSC		Operational Node
CSE	Communication Security Establishment	Operational Node
CSIS		Operational Node
Deactivate Volunteer Management and Donations	Based on need assessments, deactivate components of the plan (i.e. warehouse, phone bank) when appropriate	Operational Activity
Declare Municipal Emergency		Operational Activity
Declare National emergency		Operational Activity
Declare Provincial emergency		Operational Activity
Deliver federal dept public coms activities and products		Operational Activity
Demobilize Animal Disease Emergency Support Operations	Account for all assets utilized and safely return them to their original location and functions	Operational Activity
Demobilize Citizen Evacuation and Shelter-In-Place Operations	Upon completion of assigned duties, decontaminate equipment, supplies, and personnel if appropriate, and demobilize	Operational Activity
Demobilize Critical Resource Logistics and Distribution	Upon completion of assigned duties or as directed by superiors, shut down the logistics staging area and return to pre-incident readiness	Operational Activity
Demobilize Emergency Operations Center Management	Upon completion of response phase, terminate EOC response activities, archive records, and restore systems, supplies, and staffing to a pre-incident ready State (or as appropriate for recovery activities).	Operational Activity
Demobilize Emergency Operations Critical Tasks		Operational Activity
Demobilize Emergency Public Information and Warning	Upon deciding public information services are no longer needed, close the JIC and demobilize personnel	Operational Activity
Demobilize Environmental		Operational

Health Response		Activity
Demobilize Explosive Device Removal Operations	Upon completion of assigned mission, conduct 100% accountability of personnel and equipment, reconstitute as required and disengage from incident site, and either be placed on standby or redeploy to headquarters and stand-down	Operational Activity
Demobilize Fatality Management Operations	Return all fatality management assets and resources to pre-incident readiness levels	Operational Activity
Demobilize Fire Incident Response Support	Upon completion of activities, prepare apparatus and personnel to leave incident site and return to service	Operational Activity
Demobilize Isolation and Quarantine	Upon isolation and quarantine order being lifted, decontaminate equipment, supplies, and personnel if appropriate and demobilize	Operational Activity
Demobilize Mass Care Operations	Upon completion of assigned mission, demobilize mass care resources	Operational Activity
Demobilize Mass Prophylaxis Operations	Upon completion, stand down POD operations, return site to normal operations, and release or redeploy staff	Operational Activity
Demobilize Medical Supplies Management and Distribution	Inventory, reorganize, and reconstitute stockpiles to return to pre-incident levels, and release personnel from Medical Supplies Management and Distribution duties	Operational Activity
Demobilize Medical Surge	Prepare to return healthcare system to normal operations	Operational Activity
Demobilize On-Site Incident Management	Upon completion of the incident, implement demobilization plan and/or transition to recovery operations	Operational Activity
Demobilize Public Safety and Security Response Operations	Return to normal operations	Operational Activity
Demobilize Responder Safety and Health	Upon completion of assigned mission, evaluate responder safety and health status before demobilization and conduct follow-up analysis of health after responder returns to normal duty	Operational Activity
Demobilize Triage and Pre-Hospital Treatment	Upon completion of duties, clear the incident scene, reconstitute as appropriate, and return to service or end duty tour	Operational Activity
Demobilize WMD and Hazmat Response and Decontamination	Upon completion of response phase transition to recovery operations, inventory equipment, complete paperwork, pursue rehabilitation, and conduct post-event analysis (e.g., lessons learned) in accordance with incident demobilization plan.	Operational Activity
Demobilize/Redeploy	Upon completion of assigned mission, disengage from incident site, and debrief personnel	Operational Activity
Department of Foreign Affairs		Operational Node
Department of Justice	Department of Justice (DOJ)	Operational Node
Designate a Principal Federal Official (PFO)	Designate a Principal Federal Official (PFO) from an appropriate agency, who will assemble a support staff and deploy to the affected area as soon as possible (Federal only)	Operational Activity
Determine appropriate training and exercises necessary to address gaps	Review existing training programs. Compare needs and gaps against available training assets.	Operational Activity
Determine Municipal COAs		Operational Activity
Determine National COAs		Operational Activity
Determine Provincial COAs		Operational Activity

Determine risk tolerance		Operational Activity
Develop Action Plan Task Matrix with dept reps		Operational Activity
Develop and Maintain Plans, Procedures, Programs, and Systems		Operational Activity
Develop Incident Action Plan (IAP)	Develop all necessary components of the IAP and obtain approval	Operational Activity
Develop objectives, COA for Action Plan	Action Plan - developed based on the output of the SA and RAR and planning guidance for each operational period.	Operational Activity
Develop objectives, COA for Advance Planning	Advance Planning complements action plans and is generally oriented towards identifying response related issues and activities likely to occur over the upcoming 5-7 days.	Operational Activity
Develop objectives, COA for Contingency Plan	Contingency Plan - developed when an event is forecast weeks, months or years in advance.	Operational Activity
DFAIT	Department of Foreign Affairs and International Trade	Operational Node
DFAIT - Minister		Operational Node
DG OD Manage GOC		Operational Activity
DG OD receives RAR - request SA or provide for planning		Operational Activity
Direct all support organizations participating in EOC/MACC/IOF		Operational Activity
Direct Animal Disease Emergency Support Tactical Operations	In response to a notification of an animal disease, provide the overall management and coordination of the epidemiological investigations and animal control measures to eradicate the disease	Operational Activity
Direct Critical Resource Logistics and Distribution Operations	In response to an incident or situation that may require outside resource support, provide management and coordination for the Critical Resource Logistics and Distribution capability, from activation through demobilization	Operational Activity
Direct Emergency Operation Center's Tactical Operations	In response to notification of incident, activate, staff, and organize the EOC/MACC/IOF in accordance with emergency plans and standard operating procedures; plan, direct, and coordinate information and activities internally within EOC/MACC/IOF functions, and externally with other multi-agency coordination entities and the public information system; coordinate logistical support to maintain an operationally functioning EOC/MACC/IOF until deactivation.	Operational Activity
Direct Environmental Health Operations (Command and Control)	In response to notification of environmental hazards, provide overall mobilization, management of assessment, and coordination and support of Environmental Health activities through demobilization	Operational Activity
Direct Evacuation and/or In-Place Protection Tactical Operations	In response to a hazardous condition for a locality, direct, manage, and coordinate evacuation and/or in-place sheltering procedures for both the general population and those requiring evacuation assistance throughout incident	Operational Activity
Direct Explosive Device Response Operations	In response to notification of a potential exploding device, provide management and coordination of Explosive Device Response Operations capability, through demobilization	Operational Activity
Direct Fatality Management Tactical Operations	Direct all internal Fatality Management Operations, coordinating with other capabilities as needed	Operational Activity

Direct Fire Incident Response Support Tactical Operations	In response to indication of fire, provide coordination and management of Fire Incident Response Support through demobilization	Operational Activity
Direct Isolation and Quarantine Tactical Operations	In response to a need for isolation and quarantine orders, direct, manage, and coordinate isolation and quarantine operations	Operational Activity
Direct Mass Care Operations	In response to requests made by agencies, provide management and coordination of Mass Care Capability	Operational Activity
Direct Mass Prophylaxis Tactical Operations	In response to notification of a mass prophylaxis incident, provide overall management and coordination of mass prophylaxis operations	Operational Activity
Direct Medical Supplies Management and Distribution Tactical Operations	In response to a need for medical assets, provide overall management and coordination for Medical Supplies Management and Distribution	Operational Activity
Direct Medical Surge Tactical Operations	In response to notification of mass casualty incident, provide overall management and coordination of medical surge operations.	Operational Activity
Direct On-Site Incident Management	Planning, Logistics, Comm.. Coordinate, Supervise, Safety, Resource Request	Operational Activity
Direct Responder Safety and Health Tactical Operations	Upon dispatch of responders, provide management and coordination of Responder Safety and Health capability, through demobilization.	Operational Activity
Direct Search & Rescue Tactical Operations	In response to notification of entrapment, provide management and coordination of SAR capability, through demobilization for single or multiple teams	Operational Activity
Direct Triage and Pre-Hospital Treatment Tactical Operations	In response to a notification for emergency medical assets, provide the overall management and coordination of the Triage and Pre-Hospital Treatment Response, through to demobilization	Operational Activity
Direct WMD and Hazardous Material Response and Decontamination Tactical Ops	In response to notification of WMD/hazmat event or contamination, provide management and coordination of hazmat response and decontamination operations through demobilization and/or transition to recovery operations.	Operational Activity
Distribute Action Plan Task Matrix		Operational Activity
Distribute ITAC Threat Assessment information		Operational Activity
Distribute plan		Operational Activity
DM NSA --> ADM EMC		Need Line
DM NSC	Deputy Minister National Secuirty Committee Chair - NSA Non-emergencies - provides forum to address public saety and national secuirty and intelligence issues Membership is determined by nature of emergency	Operational Node
DM NSC --> ADM EMC	Deputy Minister National Security Committee to Assistant Deputy Minsters' Emergency Management Committee interface	Need Line
DM NSC --> Cabinet	Deputy Ministers' National Security Committee to Cabinet interface.	Need Line
DM NSC --> GOC		Need Line
DM NSC Provides EM Guidelines		Operational Activity
DMG		Operational Node
DND		Operational Node

DND - Chief Defence Intelligence		Operational Node
DND - Chief, Defence Staff		Operational Node
DND - Deputy Minister of Defence		Operational Node
DND - Minister		Operational Node
DOJ Provides legal guidance		Operational Activity
End: command transition to recovery		Operational Activity
Ensure appropriate maintenance and rest cycles are included	Ensure appropriate maintenance and rest cycles are included in resource (personnel and equipment) management activities	Operational Activity
Ensure appropriate notifications are made		Operational Activity
Ensure Safety of Building Environments	Conduct health assessments and take actions necessary to ensure that buildings can be safety re-entered	Operational Activity
Ensure Safety of Food Supplies	Conduct health assessments and take actions necessary to ensure that the food supply meets the health and safety codes of local jurisdiction	Operational Activity
Ensure Safety of Outdoor Environments	Conduct health assessments and take actions necessary to ensure that areas can be safety re-entered	Operational Activity
Ensure Safety of Potable Water Supplies	Conduct health assessments and take actions necessary to ensure that the public has sufficient access to safe potable water for drinking, washing, and ice	Operational Activity
Ensure Safety of Wastewater Management	Conduct health assessments and take actions necessary to ensure that waste water is properly managed and disposed	Operational Activity
Ensure that all Emergency Support Functions (ESFs) are staffed		Operational Activity
Environment Canada		Operational Node
Epidemiological Surveillance and Investigation		Operational Activity
Escalate/deescalate GOC response level		Operational Activity
Establish Bulk Distribution Operations	Establish bulk distribution sites and prepare them to distribute items to the affected population	Operational Activity
Establish Feeding Operations	Identify availability of resources for feeding operations	Operational Activity
Establish Full On-Site Incident Command	Establish staff and facilities necessary to conduct on-site incident command	Operational Activity
Establish Joint Information Center	Activate and implement a Joint Information Center (JIC) and disseminate information to public	Operational Activity
Establish organization/operation of EOC/MACC/IOF		Operational Activity
Establish Points Of Dispensing	Set up POD to receive members of the general public, according to POD plan	Operational Activity
Establish Security	Upon activation of warehouse, activate Medical Supplies Management and Distribution Security Plan	Operational Activity
Establish Shelter	Staff and equip shelter in preparation to receive displaced persons	Operational

Operations		Activity
Execute Plan	For each operational period, distribute Incident Action Plan (IAP) to response organizations for their assigned operations. The IAP is implemented to achieve the desired	Operational Activity
Extricate	Upon notification of location of victim, perform extrication	Operational Activity
Facilitate decision to implement isolation and quarantine, when needed		Operational Activity
Facilitate demobilization plans and procedures	Facilitate demobilization plans and procedures for preparation of after-action reports	Operational Activity
Facilitate formulation of protective action decisions (PADs), as needed		Operational Activity
Facilitate resolution to legal, policy, political, social, and economic	Facilitate resolution to legal, policy, political, social, and economic sensitivities of the affected jurisdiction(s) as they impact response and recovery operations	Operational Activity
FCC Coordinates EM		Operational Activity
FCC receives Decision Brief from GOC SA		Operational Activity
FCC receives Sit Rep from GOC SA		Operational Activity
FCO coordinates federal emergency response		Operational Activity
Federal	Canada has a federal system with three orders of government. The largest is the federal government, followed by the provincial and territorial governments. At the root level is the municipal (or local) government.	Operational Node
Federal - OGD	Other Federal Government Departments who are not acting as supporting or primary departments for a specific emergency.	Operational Node
Federal - OGD Minister	Minister of the Federal Other Government Departments (not involved in the emergency response).	Operational Node
Federal - OGD OC	Federal Other Government Department Operating Centre.	Operational Node
Federal - PLD	Federal - Primary Lead Department is a federal department with the legislated mandate related to a key element of an emergency. Depending on the nature of the emergency, there may be mulitple primary departments.	Operational Node
Federal - PLD --> Cabinet	Federal Primary Lead Department to Cabinet interface	Need Line
Federal - PLD --> Federal SD	Federal Primary Lead Department to Federal Supporting Department interface	Need Line
Federal - PLD --> GOC	Federal Primary Lead Department to GOC interface	Need Line
Federal - PLD --> Industry	Federal Primary Lead Department to Industry interface	Need Line
Federal - PLD --> International Governments	Federal Primary Lead Department to International Governments interface will be facilitated by the Department of Foreign Affairs (enabling policy).	Need Line
Federal - PLD --> ITAC	Federal Primary Lead Department to ITAC interface will be dependent on the role of the PLD in the intelligence community.	Need Line
Federal - PLD --> Media	Federal Primary Lead Department to Media interface	Need Line
Federal - PLD --> NGO	Federal Primary Lead Department to Non-Government Organisation interface	Need Line
Federal - PLD --> PS Canada	Federal Primary Lead Department to Public Safety Canada interface	Need Line
Federal - PLD EOC	Federal Primary Lead Department Emergency Operations Centre. In generic representation, the Federal PLD EOC will contain Operations, Planning, Logistics, Communications and Finance and Administration cells.	Operational Node

Federal - PLD EOC --> Media	Federal Primary Lead Department Emergency Operations Centre to Media interface.	Need Line
Federal - PLD IC	Federal Primary Lead Department Incident Commander.	Operational Node
Federal - PLD Minister	Minister of the Federal Primary Lead Department.	Operational Node
Federal - PLD Regional EOC	Federal Primary Lead Department Regional Emergency Operations Centre. In generic representation, the Federal PLD Regional EOC will contain Operations, Planning, Logistics, Communications and Finance and Administration cells.	Operational Node
Federal - PLD Regional LO	Regional Liaison Office for the Federal Primary Lead Department - has a presence in the provincial/territorial EOC.	Operational Node
Federal - PLD Regional Office	Regional Office of the Federal Primary Lead Department	Operational Node
Federal - SD	Federal Supporting Department provides general or specialised assistance to a primary department in responding to an emergency.	Operational Node
Federal - SD --> Cabinet		Need Line
Federal - SD --> Federal - PLD	Federal Supporting Department to Federal Primary Lead Department interface	Need Line
Federal - SD --> GOC	Federal Support Department to GOC interface	Need Line
Federal - SD --> ITAC	Federal Supporting Department to ITAC interface will be dependent on the role of a supporting department in the intelligence community.	Need Line
Federal - SD --> PS Canada	Federal Support Department to Public Safety Canada interface	Need Line
Federal - SD EOC	Federal Supporting Department Emergency Operations Centre. In generic representation, the Federal SD EOC will contain Operations, Planning, Logistics, Communications and Finance and Administration cells.	Operational Node
Federal - SD LO	Federal Supporting Department Liaison Officer may have a presence in the Federal Primary Lead Department EOC	Operational Node
Federal - SD Minister	Minister of the Federal Supporting Department.	Operational Node
Federal - SD Regional EOC	Federal Supporting Department Regional Emergency Operations Centre. In generic representation, the Federal SD Regional EOC will contain Operations, Planning, Logistics, Communications and Finance and Administration cells.	Operational Node
Federal - SD Regional LO	Regional Liaison Officer Federal Supporting Department - may have a presence in the provincial/territorial EOC or in the Regional Office - Federal PLD (EOC).	Operational Node
Federal - SD Regional Office	Regional Office Federal Supporting Department	Operational Node
Federal --> Industry	Federal to Industry interface	Need Line
Federal --> International Government	Federal to International Government interface	Need Line
Federal --> Media	Federal to Media interface	Need Line
Federal --> Municipal		Need Line
Federal --> NGO	Federal to NGO interface	Need Line
Federal --> Provincial/Territorial	Federal to Provincial/Territorial interface	Need Line
Federal --> PS-Regional FCC	Federal to Public Safety Canada Regional Federal Coordination Centre interface. This will include FCC interaction with all federal entities including PLD, SD, GOC etc.	Need Line
Federal declares state of emergency		Operational Activity
Federal emergency response complete		Operational Activity
Federal manage		Operational

emergency		Activity
Federal monitor emergency		Operational Activity
Federal PLD --> GOC - Ops		Need Line
Federal PLD Lead EM		Operational Activity
Federal provides support		Operational Activity
Federal SD Supports EM		Operational Activity
Federal shares information		Operational Activity
Federal-->Federal-PLD EOC	Federal to Federal Primary Lead Department Incident Commander interface. This will include PLD EOC interaction with all federal entities including SD, GOC etc.	Need Line
Federal-->Federal-PLD IC	Federal to Federal Primary Lead Department Incident Commander interface. This will include PLD IC interaction with all federal entities including SD, GOC etc.	Need Line
Federal-->Federal-PLD Regional LO	Federal to Federal Primary Lead Department Regional Liaison Officer interface. This includes interface with the Federal PLD national headquarters	Need Line
Federal-->PS-DG OD	Federal to Public Safety Canada Director General Operations Directorate interface. This will include PS-DG OD interaction with all federal entities including PLD, SD, GOC etc.	Need Line
Federal-->PS-FCO	Federal to Public Safety Canada Regional Federal Coordination Officer interface. This will include FCO interaction with all federal entities including PLD, SD, GOC etc.	Need Line
Federal-->Public	Federal to Public interface	Need Line
Federal-PLD EOC-->Federal	Federal Primary Lead Department EOC to Federal interface. This will include PLD EOC interaction with all federal entities including SD, GOC etc.	Need Line
Federal-PLD EOC-->Federal-PLD Regional EOC	Federal Primary Lead Department Emergency Operations Centre to Federal Primary Lead Department REgional Emergency Operations Centre interface.	Need Line
Federal-PLD EOC-->Media	Federal Primary Lead Department Emergency Operations Centre to Media interface.	Need Line
Federal-PLD IC-->Federal	Federal Primary Lead Department Incident Commander to Federal interface. This will include PLD IC interaction with all federal entities including SD, GOC etc.	Need Line
Federal-PLD IC-->Public	Federal Primary Lead Department Incident Commander to Public interface	Need Line
Federal-PLD Regional EOC-->Federal-PLD EOC	Federal Primary Lead Department Regional Emergency Operations Centre to Federal Primary Lead Department Emergency Operations Centre interface.	Need Line
Federal-PLD Regional LO--> P/T- EOC	Federal Primary Lead Department Regional Liaison Officer to Provincial Emergency Operations Centre interface	Need Line
Federal-PLD Regional LO-->Federal	Federal Primary Lead Department Regional Liaison Officer to Federal interface. This includes interface with the Federal PLD national headquarters	Need Line
Federal-PLD Regional LO-->P/T EOC	Federal Primary Lead Department Regional Liaison Officer to Provincial EOC interface. This interface may involve the PLD Regional LO co-location in a P/T EOC.	Need Line
Federal-PLD-->GOC-Logistics	Federal Primary Lead Department to GOC Logistics interface	Need Line
Federal-PLD-->Public	Federal Primary Lead Department to Public interface	Need Line
Federal-SD-->GOC-Logistics	Federal Support Department to GOC Logistics interface	Need Line
Finance and Administration		Operational Activity
Finance Canada		Operational

		Node
First Responders	Police, Fire and EMS are the primary first responders who are traditionally first on the scene in an emergency situation.	Operational Node
Forward Action Plan Task Matrix to PS - DG OD for approval		Operational Activity
Forward Action Plan to GOC - Operations for implementation and coordination		Operational Activity
FR --> Municipal LD IC	First Responder to Municipal Lead Department Incident Commander interface.	Need Line
Fulfill duties of PS - DG OD in his/her absence		Operational Activity
Gather and Provide Information	Upon establishing EOC operations, gather, organize, and document incident situation and resource information from all sources to maintain situational awareness within the EOC/MACC/IOF, and horizontally and vertically within the National Incident Management System.	Operational Activity
Gather and Provide information critical tasks		Operational Activity
Gather information		Operational Activity
GOC	The Government Operations Centre (GOC) is Canada's strategic-level operations centre. It is the hub of a network of operations centres run by a variety of federal departments and agencies including the RCMP, Health Canada, Foreign Affairs, CSIS and National Defence. The GOC also maintains contact with the provinces and territories as well as international partners such as the United States and NATO. It operates 24 hours a day, seven days a week, gathering information from other operations centres and a wide variety of sources, both open and classified, from around the world. The GOC deals with anything – real or perceived, imminent or actual, natural disaster or terrorist activity – that threatens the safety and security of Canadians or the integrity of Canada's critical infrastructure.	Operational Node
GOC - Director		Operational Node
GOC - Director F & A	GOC - Director Finance and Administration is sourced from the Public Safety Canada Operations Directorate.	Operational Node
GOC - Director Logistics	GOC - Director Logistics is sourced from the Public Safety Canada Operations Directorate.	Operational Node
GOC - Director Operations	Sourced from the Public Safety Canada Operations Directorate.	Operational Node
GOC - Director Planning	GOC - Director Planning is sourced from the Public Safety Canada Operations Directorate.	Operational Node
GOC - Director RA	GOC - Director Risk Assessment is sourced from the Public Safety Canada Operations Directorate.	Operational Node
GOC - Director SA	GOC - Director Situational Awareness is sourced from the Public Safety Canada Operations Directorate.	Operational Node
GOC - Disaster Information Support Centre		Operational Node
GOC - DOJ Rep	Department of Justice Representative in the GOC. Legal counsel provided by Public Safety Canada Legal Services Unit and Department of Justice as required.	Operational Node

GOC - Duty Officer - National Communications		Operational Node
GOC - F & A	GOC - Finance and Administration as a primary function of the GOC is responsible for providing financial and admistrative support.	Operational Node
GOC - Federal PLD Reps	Federal primary lead department liaison officers, subject matter experts act as departmental representatives who support the GOC primary functions.	Operational Node
GOC - Federal SD Reps	Federal Supporting Department liaison officers, subject matter experts act as departmental representatives who support the GOC primary functions.	Operational Node
GOC - Geomatics Team		Operational Node
GOC - LO	Government of Canada Operations Centre Liaison Officer - Generic	Operational Node
GOC - Logistics	GOC - Logistics is responsible for enabling the procurement and/or the provision of needed personnel, goods and/or transportation resources to one or more regions affected by the emergency. A key goal is to eliminate duplication of effort by various organizations (both government and NGO) at the strategic level.	Operational Node
GOC - Ops	GOC - 24/7 monitoring, validation, and reporting. Operations is a primary function of the GOC Non-emergencies	Operational Node
GOC - Other Representatives	NGO or private sector representatives that may be requested to provide subject matter expertise.	Operational Node
GOC - PCO	GOC Public Communications Officer - fulfilled by the PS - ADG CD	Operational Node
GOC - Planning	GOC Planning is responsible for developing objectives, course of action, and event-specific government response plans based on information from the risk assessment. The proposed objectives and course of action are approved by the management team in consultation with the federal Coordination Officer	Operational Node
GOC - Provincial - EOC		Need Line
GOC - PS - DG OD		Need Line
GOC - PS Canada		Need Line
GOC - RA	GOC Risk Assessment is responsible for determining the impact of an emergency and the risk level.	Operational Node
GOC - SA	GOC Situational Awareness provides emergency-related information to support policy and decision making by various stakeholders.	Operational Node
GOC - Situation Centre		Operational Node
GOC - Watch Officer		Operational Node
GOC --> ADM EMC	GOC to Assistant Deputy Ministers' Emergency Management Committee	Need Line
GOC --> Cabinet		Need Line
GOC --> DM NSC		Need Line
GOC --> Federal - SD	GOC to Federal Support Department interface	Need Line
GOC --> Federal PLD	GOC to Federal Primary Lead Department interface	Need Line
GOC --> Industry	GOC to Industry interface	Need Line
GOC --> International Governments	GOC to International Governments interface will be dependent on the role of the international government in a specific emergency.	Need Line
GOC --> ITAC		Need Line
GOC --> NGO	GOC to Non-Government Organisation interface	Need Line
GOC --> OC		Need Line
GOC --> PCO	GOC to Privy Council Office interface	Need Line
GOC --> Provincial		Need Line
GOC --> PS - DG OD		Need Line
GOC --> PS Canada	GOC to Public Safety Canada interface	Need Line
GOC F&A Facilitates F&A	GOC - Finance and Administration is a primary function of the GOC responsible for	Operational

	providing financial and admistrative support to the GOC.	Activity
GOC facilitate EM	GOCs Primary functions: - Management - Operations - Situational Awareness - Risk Assessment - Planning - Logistics - Finance and administration	Operational Activity
GOC Log Facilitates Logistics	GOC - Logistics is responsible for enabling the procurement and/or the provision of needed personnel, goods and/or transportation resources to one or more regions affected by the emergency. A key goal is to eliminate duplication of effort by various organisations (both government and NGO) at the strategic level.	Operational Activity
GOC -OC		Need Line
GOC Ops Facilitate Operations	GOC - 24/7 monitoring, validation, and reporting. Operations is a primary function of the GOC Non-emergencies	Operational Activity
GOC OPs provides 24/7 monitoring, validating and reporting		Operational Activity
GOC Ops receive, prioritize, distribute and log all classified & unclass docs		Operational Activity
GOC OPs receives, prioritize, distribute and log all in-coming unclassified docs		Operational Activity
GOC Planning Facilitates Planning	The planning function is responsible for developing objectives, course of action, and event-specific government response plans based on information from the risk assessment. The proposed objectives and course of action are approved by the management team in consultation with the federal Coordination Officer	Operational Activity
GOC RA Facilitates RA	GOC Risk Assessment is responsible for determining the impact of an emergency and the risk level.	Operational Activity
GOC SA communicate information to decision-makers - SA Notification		Operational Activity
GOC SA communicates information to decision-makers through SA product - Sit Rep		Operational Activity
GOC SA develop geometrics		Operational Activity
GOC SA Facilitate SA	GOC Situational Awareness provides emergency-related information to support policy and decision making by various stakeholders.	Operational Activity
GOC SA review, analyse and synthesize info from multiple sources		Operational Activity
GOC-DOJ --> PS-DG OD		Need Line
GOC-F&A --> GOC-Logistics	GOC Finance & Administration to GOC Logistics interface. F&A provides support to other GOC members.	Need Line
GOC-F&A --> GOC-Operations	GOC Finance & Administration to GOC Operations interface. F&A provides support to other GOC members.	Need Line

GOC-F&A --> GOC-Planning	GoC Finance & Administration to GOC Planning interface. F&A provides support to other GOC members.	Need Line
GOC-F&A -->GOC-SA	GOC Finance & Administration to GOC Situation Awareness interface. F&A provides support to other GOC members.	Need Line
GOC-F&A -->RA	GOC Finance & Administration to GOC Risk Assessment interface. F&A provides support to other GOC members.	Need Line
GOC-Logistics --> PS-DG OD	GOC Logistics to Public Safety Canada Director General Operations Directorate interface	Need Line
GOC-Logistics-->Federal-PLD	GOC Logistics to Federal Primary Lead Department interface	Need Line
GOC-Logistics-->Federal-SD	GOC Logistics to Federal Support Department interface	Need Line
GOC-Logistics-->Industry	GOC Logistics to Industry interface	Need Line
GOC-Logistics-->NGO	GOC-Logistics to Non-Government Organisation interface	Need Line
GOC-Logistics-->P/T-EOC	GOC Logistics to Provincial/Territorial Emergency Operations Centre interface	Need Line
GOC-Ops --> GOC-SA		Need Line
GOC-Planning --> GOC-Operations		Need Line
GOC-Planning --> PS-DG OD		Need Line
GOC-PLD --> PS-DG OD		Need Line
GOC-RA --> GOC-Planning	GOC Risk Assessment to GOC Planning interface	Need Line
GOC-RA --> PS-DG OD	GOC Risk Assessment to Public Safety Canada Director General Operations Directorate interface	Need Line
GOC-SA --> ADM EMC	GOC Situation Awareness to Assistant Deputy Ministers' Emergency Management Committee interface	Need Line
GOC-SA --> Cabinet	GOC Situation Awareness to Cabinet interface.	Need Line
GOC-SA --> DM NSC	GOC Situation Awareness to Deputy Ministers' National Security Committee.	Need Line
GOC-SA --> DOJ	GOC Situation Awareness to GOC Department of Justice Representive.	Need Line
GOC-SA --> Federal SD	GOC Situation Awareness to Federal Supporting Department interface.	Need Line
GOC-SA -> Federal-PLD	GOC Situation Awareness to Federal Primary Lead Department interface.	Need Line
GOC-SA --> GOC RA	GOC Situation Awareness to GOC Risk Assessment interface. SA provides situation awareness to other GOC members.	Need Line
GOC-SA --> GOC-F&A	GOC Situation Awareness to GOC Finance & Administration interface. SA provides situation awareness to other GOC members.	Need Line
GOC-SA --> GOC-Logistics	GOC Situation Awareness to GOC Logistics interface. SA provides situation awareness to other GOC members.	Need Line
GOC-SA --> GOC-Ops	GOC Situation Awareness to GOC Operations interface. SA provides situation awareness to other GOC members.	Need Line
GOC-SA --> Industry		Need Line
GOC-SA --> NSA	GOC Situation Awareness to National Security Advisor interface.	Need Line
GOC-SA --> P/T		Need Line
GOC-SA --> P/T EOC	GOC Situation Awareness to Provincial/Territorial Emergency Operations Centre interface	Need Line
GOC-SA -> PS Canada		Need Line
GOC-SA --> PS- Regional FCC	GOC Situation Awareness to Publc Safety Canada Regional Federal Coordination Centre interface	Need Line
GOC-SA --> PS-DG OD	GOC Situation Awareness to Public Safety Canada Director General Operations Directorate interface.	Need Line
GOC-SA -->GOC-Planning	GOC Situation Awareness to GOC Planning interface. SA provides situation awareness to other GOC members.	Need Line
GOC-SA -->NGO		Need Line

GOC-SA-->Municipal EOC	GOC Situation Awareness to Municipal Emergency Operations Centre interface.	Need Line
GOC-SA-->PS-ADG CD	GOC situation Awareness to Public Saftey Canada Associate Director General, Communications Directorate interface	Need Line
GOC-SA-->PS-FCO	GOC Situation Awareness to Public Safety Canada Federal Coordination Officer interface	Need Line
Guide federal department representatives through FERMS process		Operational Activity
Guide federal department representatives through the FERMS process		Operational Activity
Guide federal department reps through FERMS process		Operational Activity
Guide the integration of EM activities on behalf of the Government of Canada		Operational Activity
Halifax		Operational Node
Halifax - CAO		Operational Node
Halifax - Council of the Halifax Regional Municipality		Operational Node
Halifax - EMO Coordinator		Operational Node
Halifax - EMPO		Operational Node
Halifax - Fire and emergency Services		Operational Node
Halifax - Fire Dispatcher		Operational Node
Halifax - Hazardous Materials Response Team and CBRNE team		Operational Node
Halifax - HRFE	Fire and Emergency Services	Operational Node
Halifax - HRM EMC		Operational Node
Halifax - HRM EMO		Operational Node
Halifax - HRM EOC		Operational Node
Halifax - HRM Hazmat Team		Operational Node
Halifax - HRP		Operational Node
Halifax - HRP Hazmat Team		Operational Node
Halifax - HRPB		Operational Node

Halifax - Land Detachment Police		Operational Node
Halifax - Marine Emergency Response Team		Operational Node
Halifax - Mayor		Operational Node
Halifax - Municipal Emergency Measures Advisory Committee	(1) The Municipal Emergency Measures Advisory Committee shall be appointed by 3 Council for such term as the Council deems necessary. (2) The Municipal Emergency Measures Advisory Committee shall at all times consist of the Mayor, Deputy Mayor, no fewer than two councilors, and the Chief Administrative Officer. (3) The Municipal Emergency Measures Advisory Committee shall: (a) advise Council on the development of municipal emergency measures plans; (b) present municipal emergency measures plans to Council; (c) brief Council on developments during a local state of emergency; and (d) perform such other duties as may be required by the Council.	Operational Node
Halifax - Municipal Emergency Measures Co-ordinator	(3) The Municipal Emergency Measures Co-ordinator shall: (a) co-ordinate and prepare municipal emergency measures plans, training and exercises; and (b) be responsible for on-going public self-help education programs related to emergency preparedness; (c) following activation of the municipal plan or a declaration of state of local emergency, prescribe, as necessary, duties to be fulfilled by employees, agents, and volunteer fire fighters of the Regional Municipality; and (d) perform such other duties as may be required by the Council.	Operational Node
Halifax - Municipal Emergency Measures Planning Committee	(1) The Municipal Emergency Measures Planning Committee shall be appointed by Council for such term as the Council may prescribe. (2) The Municipal Emergency Planning Committee shall consist of the Chief Administrative Officer, the Emergency Measures Coordinator, and the commissioner or chief of every municipal department or agency which is assigned emergency related functions under municipal emergency measures plans and, where no department or agency exists, a qualified person to represent that group. The Chief Administrative Officer will chair the Municipal Emergency Measures Planning Committee. (3) The Municipal Emergency Measures Planning Committee shall include, but not be limited to, persons responsible during an emergency to provide: (a) law enforcement (b) search and rescue (c) fire control services (d) hazardous materials control services (e) transportation (f) engineering services (g) water (h) wastewater (i) solid waste (j) telecommunications (k) financial services (l) legal services (m) administrative services (n) human resource management (including health and safety) (o) information systems	Operational Node

	(p) purchasing/materials management (q) physical, social and environmental planning information (r) public information (3) The Municipal Emergency Measures Planning Committee shall also include persons responsible during an emergency to coordinate the following functions with municipal emergency measures plans: 5 (a) income assistance (b) community services (c) health services (4) The Municipal Emergency Measures Planning Committee shall: (a) assist the Municipal Emergency Measures Co-ordinator in the preparation and coordination of municipal emergency measures plans; (b) advise the Municipal Emergency Measures Advisory Committee on the development of municipal emergency measures plans; (c) upon request, assist the Municipal Emergency Measures Advisory Committee in the presentation of municipal emergency measures plans to Council; (d) following activation of the municipal or departmental emergency plan or a declaration of state of local emergency, prescribe, as necessary, duties to be fulfilled by employees, agents, and volunteer fire fighters of the municipality; and (e) perform such other duties as may be required by the Municipal Emergency Measures Advisory Committee or the Council. (5) Each member of the Emergency Planning Committee shall prepare an emergency plan for the emergency functions assigned in the master emergency plan to their department, agency or area of responsibility. Members will submit plans to the Emergency Measures Advisory Committee for approval. Plans include training and exercise programs.	
Halifax - Police Dispatcher		Operational Node
Halifax - Police Port Detachment		Operational Node
Halifax - Police Services		Operational Node
Halifax - Special Operations USAR CBRN		Operational Node
Halifax - Unified Incident Command		Operational Node
I --> F	Industry to Federal interface	Need Line
I --> M	Industry to Municipal interface	Need Line
I --> P/T	Industry to Provincial/Territorial interface	Need Line
Identify and Address Issues	Upon receiving information, assess and identify current and anticipated resource shortages, technical support issues, and key policy decisions needed across all capabilities, and provide to the applicable agency, function, jurisdiction or multi-agency coordination entity for resolution.	Operational Activity

	Critical Tasks	
Identify and Address Issues Critical Tasks		Operational Activity
Identify and elevate needs	Identify and elevate needs/issues up the chain of command as needed, while tracking status	Operational Activity
Identify and request departments to contribute federal representatives to GOC		Operational Activity
Identify if the evacuation is short term or long term		Operational Activity
Identify issues		Operational Activity
Identify Safety/PPE Needs and Distribute PPE	Upon appointment as Safety Officer, assess safety and heath hazards, inform IC of needs, and develop site-specific safety and health plan	Operational Activity
Identify the Hazard	Upon arriving on scene, begin to assess site, sample, identify, and characterize WMD/hazmat and contamination situation, conduct hazard analysis to determine potential consequence and risk, develop plans for safety and hazmat/decontamination operations, and set up hazmat zones.	Operational Activity
IG --> F	International Government to Federal interface	Need Line
IG-->M	International Governments to Municipal interface. This is primary with the US due to neighbouring issues along the common border.	Need Line
IG-->Municipal-EOC	International Government to Municipal Emergency Operations Centre interface. This is primary with the US due to neighbouring issues along the common border.	Need Line
IG-->P/T	International Governments to Provincial/Territorial interface. This is primary with the US due to neighbouring issues along the common border.	Need Line
Implement continuity of operations plans gov. plans	Implement continuity of operations (COOP) plans and continuity of government (COG) plans	Operational Activity
Implement Disease Containment Measures	Establish isolation and quarantine zones, issue stop movement orders, and initiate animal vaccination and treatment programs, euthanasia efforts, or other protective measures designed to control the spread of the disease	Operational Activity
Implement EOC demobilization, deactivation, and transitional plan to JFO	Implement EOC/MACC/IOF demobilization, deactivation, and transitional plan to JFO	Operational Activity
Implement Evacuation Orders for General Population	Assist the self-evacuation of affected population by providing public information and instructions, traffic control, and support services to evacuees along evacuation routes	Operational Activity
Implement In-Place Protection Procedures	Upon in-place protection activation, assist at-risk population in sheltering in homes or designated in-place sheltering locations	Operational Activity
Implement Mandatory Isolation and Quarantine	Ensure compliance with orders for separation and restriction of movement of potentially exposed asymptomatic individuals and isolation of symptomatic individuals within an identified geographic area	Operational Activity
Implement On-Site Incident Management	In response to an incident, arrive on scene and provide initial scene report while beginning response operations; carry out management, planning, and coordination of on-site incident	Operational Activity
Implement Surge Patient Transfer Procedures	Transition from pre-event bed utilization to access surge capabilities	Operational Activity
Implement Surge Staffing Procedures	Maximize staffing levels in accordance with medical surge plans	Operational Activity
Implement Travel	Screen travelers from outbreak or pandemic areas and implement travel restrictions	Operational

Restrictions	consistent with disease specific precautions	Activity
Implement Voluntary Isolation and Quarantine	Within an identified geographic area, implement separation and restriction of movement of potentially exposed asymptomatic individuals and isolate symptomatic individuals on a voluntary basis	Operational Activity
Include Business Operation Center capability within state EOCs		Operational Activity
Industry	Private industry stakeholders - generic.	Operational Node
Industry --> Federal	Industry to Federal interface	Need Line
Industry --> Federal - PLD	Industry to Federal Primary Lead Department interface	Need Line
Industry --> GOC	Industry to GOC interface	Need Line
Industry --> Municipal	Industry to Municipal interface	Need Line
Industry --> Provincial/Territorial interface	Industry to Provincial/Territorial interface	Need Line
Industry Canada		Operational Node
Industry-->Federal-PLD EOC	Industry to Federal Primary Lead Department Emergency Operations Centre interface	Need Line
Industry-->GOC-Logistics	Industry to GOC Logistics interface	Need Line
Industry-->Municipal-EOC	Industry to Municipal Emergency Operations Centre interface	Need Line
Industry-->P/T-EOC	Industry to Provincial/Territorial Emergency Operations Centre interface	Need Line
Industry-->PS-Regional FCC	Industry to Public Safety Canada Regional Federal Coordination Centre interface	Need Line
Interact with crown corporations		Operational Activity
Interact with federal depts (and regional depts)		Operational Activity
Interact with Federal PLD EOC		Operational Activity
Interact with Federal SD EOC		Operational Activity
Interact with GOC		Operational Activity
Interact with industry/private sector		Operational Activity
Interact with international governments		Operational Activity
Interact with NGOs		Operational Activity
Interact with province/territory EMO		Operational Activity
Interdepartmental Committee on Security and Intelligence		Operational Node
International Government --> GOC	International Governments to GOC interface will be dependent on the role of the international government in a specific emergency.	Need Line
International Governments	International governments that are stakeholders in the emergency - generic.	Operational Node
International Governments --> Federal - PLD	International Governments to Federal Primary Lead Department interface will be facilitated by the Department of Foreign Affairs (enabling policy).	Need Line

International Governments --> Federal - PLD	International Governments to Federal Primary Lead Department interface will be facilitated by the Department of Foreign Affairs (enabling policy).	Need Line
International Governments --> ITAC	International Governments to ITAC interface will be dependent on the role of the international government in a specific emergency and agreements for sharing intelligence information.	Need Line
Issue Public Information, Alerts/Warnings, and Notifications	Issue public information, alerts, warnings, and notifications through established systems to the public, coordinating officials, and incident managers and responders.	Operational Activity
ITAC	The Integrated Threat Assessment Centre (ITAC) facilitates increased information-sharing and integrated intelligence analysis. ITAC produces threat assessments for the Government of Canada, which are distributed within the intelligence community and to relevant first responders, such as law enforcement. The assessments evaluate the probability and potential consequences of threats, allowing policy-makers and first responders to have the information needed to make decisions and take actions that contribute to the safety and security of Canadians. Partners: Canada Border Services Agency Canadian Security Intelligence Service Communications Security Establishment Correctional Service of Canada Department of National Defence Financial Transactions and Reports Analysis Centre of Canada Foreign Affairs and International Trade Canada Ontario Provincial Police Privy Council Office Public Safety Royal Canadian Mounted Police Transport Canada	Operational Node
ITAC --> Federal - PLD	ITAC to Federal Primary Lead Department interface will be dependent on the role of the PLD in the intelligence community.	Need Line
ITAC --> Federal - SD	ITAC to Federal Supporting Department interface will be dependent on the role of a supporting department in the intelligence community.	Need Line
ITAC --> GOC RA	Integrated Threat Assessment Centre to GOC Risk Assessment interface	Need Line
ITAC --> International Governments	ITAC to International Governments interface will be dependent on the role of the international government in a specific emergency and agreements for sharing intelligence information.	Need Line
JTF - A		Operational Node
JTF - C		Operational Node
JTF - P		Operational Node
JTF - R		Operational Node
Laboratory Testing		Operational Activity
Lead PS - Regional Office		Operational Activity
Liaise with Federal PLD EOC		Operational Activity
Liaise with Federal Primary Lead Department		Operational Activity
Liaise with Regional Office		Operational

Federal Primary Lead Department		Activity
Log report of Incident		Operational Activity
Logistics		Operational Activity
M - Media	Municipal to Media interface	Need Line
M --> I	Municipal to Industry interface	Need Line
M --> NGO	Municipal to NGO interface	Need Line
M --> P/T	Municipal to Provincial/Territorial interface	Need Line
M-->IG	Municipal to International Governments interface. This is primary with the US due to neighbouring issues along the common border.	Need Line
Maintain and Recover Resources	Recover all resources deployed for response and recovery support, rehabilitate and resupply all resources, rest and recuperate all personnel, review tracking system, and retrace all resources back to original provider. The recovery process involves the final disposition of all resources	Operational Activity
Maintain financial records and accounts related to GOC operations		Operational Activity
Maintain kitchen/eating areas		Operational Activity
Maintain Public Order	Provide a visible law enforcement presence at key locations within the affected area. Protect people and property, and deter criminal activity	Operational Activity
Make proper connections with other agencies involved in incident		Operational Activity
Manage Antemortem Data	Initiate plan for the collection and management of antemortem information from family members and other sources	Operational Activity
Manage Canadian foreign policy		Operational Activity
Manage Criminal Justice Population	Manage criminal justice population to include incarcerated persons, those under criminal justice supervision, and tactically arrested individuals in the affected area	Operational Activity
Manage Emergency Public Information and Warnings	In recognition of likely hazards provide management and coordination of public information, alert/warning, and notification activities	Operational Activity
Manage Incoming Evacuees	In coordination with other service agencies, provide short-term and long-term support to evacuees arriving from affected areas	Operational Activity
Manage logistics operations in accordance with log planning objectives		Operational Activity
Manage operations in accordance to action plan/contingency plan		Operational Activity
Manage the flow of information and RFAs from the prov/terr EOC to FCC/GOC		Operational Activity
Media	Public media stakeholders	Operational Node
Media --> F	Media to Federal interface	Need Line
Media --> Federal - PLD	Media to Federal Primary Lead Department interface	Need Line
Media --> Federal - PLD	Media to Federal Primary Lead Department Emergency Operations Centre	Need Line

EOC	interface.	
Media --> M	Media to Municipal interface	Need Line
Media --> P/T	Media to Provincial/Territorial	Need Line
Media --> PS Canada	Media to Public Safety Canada interface	Need Line
Media-->Municipal-EOC	Media to Municipal Emergency Operations Centre interface	Need Line
Media-->Provincial EOC	Media to Provincial/Territorial Emergency Operations Centre interface	Need Line
Media-->PS-ADG CD	Media to Public Safety Canada Associate Director General, Communications Directorate interface	Need Line
Media-->PS-Regional FPCCG	Media to Public Safety Canada Regional Federal Public Communications Coordination Group interface	Need Line
Monitor Adverse Events	Through monitoring, identify individuals who have an adverse reaction to prescribed medication and initiate appropriate medical care	Operational Activity
Monitor communications and information systems		Operational Activity
MSOC		Operational Node
Municipal	Canada has a federal system with three orders of government. The largest is the federal government, followed by the provincial and territorial governments. At the root level is the municipal (or local) government. Municipal governments are controlled by the provincial (or territorial) order of government.	Operational Node
Municipal -- > Federal		Need Line
Municipal - City Manager	The City Manager guides the operations of the municipality and advises Council in the management of all its fiscal, organizational and service challenges. The City Manager is accountable to Council for the policy direction and program delivery of divisions, including the EMO.	Operational Node
Municipal - Council	A municipal council is a democratically elected form of government for municipalities.	Operational Node
Municipal - EMO	Municipal Emergency Management Organisation - EMO will lead the coordination, development and implementation of prevention, mitigation, preparedness, response and recovery strategies for emergency management in the municipality.	Operational Node
Municipal - EOC	Municipal Emergency Operations Centre. In generic representation, the Provincial EOC will contain Operations, Planning, Logistics, Communications and Finance and Administration cells.	Operational Node
Municipal - EOC --> Municipal - LD		Need Line
Municipal - EOC --> Municipal SD	Municipal EOC to Municipal Support Department interface	Need Line
Municipal - EOC Duty Officer		Operational Node
Municipal - EOCG	Municipal - Emergency Operations Control Group provides overall direction and control of the EMO	Operational Node
Municipal - LD	Municipal Lead Department is a municipal department designated to lead the emergency response. Depending on the nature of the emergency, there may be multiple lead departments.	Operational Node
Municipal - LD EMO LO		Operational Node
Municipal - LD EOC	Municipal Lead Department Emergency Operations Centre. In generic representation, the EOC will contain Operations, Planning, Logistics, Communications and Finance and Administration cells.	Operational Node
Municipal - LD IC		Operational Node
Municipal - LD IC --> First Responders	Municipal Lead Department Incident Commander to First Responder interface.	Need Line

Municipal - LD Municipal EOC LO		Operational Node
Municipal - Mayor	The mayor is an elected politician who serves as chief executive of a municipality.	Operational Node
Municipal - Neighbouring Municipality	Neighbouring Municipalities may provide support or assistance to the affected Municipality	Operational Node
Municipal - OGD	Municipal Other Government Department not involved in the emergency response.	Operational Node
Municipal - SD	Municipal Supporting Department is a municipal department who provides general or specialised assistance to a lead department in responding to an emergency. Depending on the nature of the emergency, there may be mulitple supporting departments.	Operational Node
Municipal - SD --> Municipal - EOC	Municipal Support Department to Municipal EOC interface	Need Line
Municipal --> Industry	Municipal to Industry interface	Need Line
Municipal --> Media	Municipal to Media interface	Need Line
Municipal --> NGO	Municipal to Non-Government Organisation interface	Need Line
Municipal declares state of emergency		Operational Activity
Municipal emergency response complete		Operational Activity
Municipal jurisdictions affected increase		Operational Activity
Municipal LD --> Municipal EOC		Need Line
Municipal manage emergency		Operational Activity
Municipal manage recovery		Operational Activity
Municipal monitor emergency		Operational Activity
Municipal receives provincial support and guidance		Operational Activity
Municipal Request Provincial Assistance		Operational Activity
Municipal resources overwelmed	High Level OpActivity	Operational Activity
Municipal Shares Information		Operational Activity
Municipal-EOC-->GOC-Operations	Municipal Emergency Operations Centre to GOC Operations interface.	Need Line
Municipal-EOC-->IG	Municipal Emergency Operations Centre to International Government interface. This is primary with the US due to neighbouring issues along the common border.	Need Line
Municipal-EOC-->Industry	Municipal Emergency Operations Centre to Industry interface	Need Line
Municipal-EOC-->Media	Municipal Emergency Operations Centre to Media interface	Need Line
Municipal-EOC-->Municipal Neighbouring	Municipal Emergency Operations Centre to Municipal Neighbouring Municipal Emergency Operations Centre interface	Need Line
Municipal-EOC-->Municipal-EOCG	Municipal Emergency Operations Centre to Municipal Emergency Operations Control Group interface	Need Line
Municipal-EOC-->NGO	Municipal Emergency Operations Centre to Non-Government Organisation interface	Need Line
Municipal-EOC--	Municipal Emergency Operations Centre to Provincial Municipal Emergency	Need Line

>Provincial-Municipal LO	Operations Centre Liaison Officer interface	
Municipal-EOCG-->Municipal-EOC	Municipal Emergency Operations Control Group to Municipal Emergency Operations Centre interface	Need Line
Municipal-EOCG-->Municipal-Mayor	Municipal Emergency Operations Coordination Group to Municipal Mayor interface	Need Line
Municipal-LD EOC-->Municipal LD Municipal EOC LO	Municipal Lead Department Emergency Operations Centre to Municipal Lead Department Municipal Emergency Operations Centre Liaison Officer interface	Need Line
Municipal-LD IC-->Public	Municipal Lead Department Incident Commander to Public Interface	Need Line
Municipal-LD Municipal EOC LO-->Municipal-LD EOC	Municipal Lead Department Municipal Emergency Operations Centre Liaison Officer to Municipal Lead Department Emergency Operations Centre interface	Need Line
Municipal-Mayor-->Municipal		Need Line
Municipal-Mayor-->Municipal EOCG	Municipal Mayor to Municipal Emergency Operations Coordination Group interface	Need Line
Municipal-Neighbouring-->Municipal-EOC	Municipal Neighbouring Municipal Emergency Operations Centre to Municipal Emergency Operations Centre interface	Need Line
National Security Advisor	The National Security Advisor (NSA) to the Prime Minister and Associate Secretary to the Cabinet assists the Clerk and provides information, advice and recommendations to the Prime Minister as follows: As Associate Secretary to the Cabinet he or she can act on the Clerk's behalf on any of the policy and operational issues that come before the Privy Council Office. As National Security Advisor to the Prime Minister he or she ensures the effective coordination of Canada's security and intelligence community and, together with the Deputy Minister of National Defence, is responsible for the Communications Security Establishment. The National Security Advisor also oversees the provision of intelligence assessments to the Prime Minister, other ministers and senior government officials. The National Security Advisor to the Prime Minister is supported by two secretariats via the Foreign and Defence Policy Advisor to the Prime Minister: Security and Intelligence International Assessment Staff .	Operational Node
National Security Advisory Council	National Security Advisory Council consists of non-government members.	Operational Node
NGO	Non-Government Organisations - generic.	Operational Node
NGO --> Federal		Need Line
NGO --> Federal - PLD	Non-Government Organisation to Federal Primary Lead Department interface	Need Line
NGO --> GOC	Non-Government Organisation to GOC interface	Need Line
NGO --> M	Non-Government Organisation to Municipal interface	Need Line
NGO --> P/T	Non-Government Organisation to Provincial/Territorial interface	Need Line
NGO-->GOC-Logistics	Non-Government Organisation to GOC Logistics interface	Need Line
NGO-->Municipal-EOC	Non-Government Organisation to Municipal Emergency Operations Centre interface	Need Line
NGO-->P/T-EOC	Non-Government Organisation to Provincial/Territorial Emergency Operations Centre interface	Need Line
NGO-->PS-Regional FCC	Non-Government Organisation to Public Safety Canada Regional Federal Coordination Centre interface	Need Line

NPB	National Parole Board	Operational Node
NS		Operational Node
NS - Associate Director of Public Information	o liaising with the Director of Emergency Public Information and directing departmental communications efforts as required o advising the Director of Emergency Public Information on the timing, content, production, and release of information to the media o direct communications personnel and coordinating public information from the EOC, other response agencies, the site, and/or the zones for release o monitoring the effective delivery of information to the public o identifying special briefing requirements for spokespersons o providing updates to zone controllers and the site information coordinator o facilitating information coordination between the media centre, departments, and partners	Operational Node
NS - Chief Medical Examiner		Operational Node
NS - Department of Health		Operational Node
NS - Department of Justice		Operational Node
NS - Director Emergency Public Information	The Director of Emergency Public Information reports directly to the Minister, or designate, responsible for the management of the emergency. Responsibilities include o establishing an emergency media information centre o coordinating communications personnel required at the Emergency Operations Centre, media centre, sites, and other locations o coordinating media o coordinating public warnings and information, using all available and appropriate resources o coordinating, with other participating agencies, the activation of an emergency broadcast system capable of reaching all citizens of Nova Scotia o identifying spokespersons to conduct informal and technical briefings o coordinating news conferences and briefings o liaising with the Director of Operations and authorizing and coordinating the release of information to the public and media o maintaining a log.	Operational Node
NS - EHS		Operational Node
NS - EMONS	To ensure the safety and security of Nova Scotians, their property and environment by providing for a prompt and coordinated response to an emergency.	Operational Node
NS - EMONS - 911 Halifax Public Safety Answering Phone		Operational Node
NS - EMONS - Critical Infrastructure Planner		Operational Node
NS - EMONS - Deputy Head		Operational Node
NS - EMONS - Director		Operational

Emergency Services		Node
NS - EMONS - Federal/Provincial Liaison Officer		Operational Node
NS - EMONS - Military Liaison Officer		Operational Node
NS - JEOC	The Joint Emergency Operations Centre (JEOC) is a designated location for the coordination, direction, and management of emergency responses. It is located in the Eric Spicer Building at 21 Mount Hope Avenue, Dartmouth, Nova Scotia. The JEOC is a combined effort on behalf of EMO (NS) and its federal counterpart, the Office of Critical Infrastructure Protection and Emergency Preparedness (OCIPEP).	Operational Node
NS - JEOC - DEPOs	Each department in the Nova Scotia government has a Departmental Emergency Preparedness Officer (DEPO) and one or more alternates. A DEPO is usually a senior staff member in a department who has the authority to mobilize any resources or personnel belonging to the department to assist in the emergency response. Aside from the tasks outlined below, specific DEPO emergency responsibilities are established in EMO (NS) policy. The alternate will work in the same capacity if the DEPO is unavailable or if the emergency extends over a period of time. DEPOs may act in any position outlined in the Emergency Management System organizational chart on page 11. DEPOs may also develop a similar organizational structure within their own departments. In an emergency, DEPOs will o check in at the emergency operations centre and determine the status of agency resources that may have been assigned to the emergency o obtain briefings from the planning officer o attend planning meetings and briefings as required o liaise with their own department's EOC if applicable and relay appropriate information to the operations director o provide input on the use of agency resources o monitor the well-being and safety of any departmental staff involved in the emergency o advise on any special agency needs or requirements o develop special reports or documents, as required o maintain a log	Operational Node
NS - JEOC - Duty officer		Operational Node
NS - JEOC - Feeding Officer	The Feeding Officer will plan and obtain food and drinks for emergency workers, agency representatives, and victims. Specific duties and tasks may include. o obtaining briefings from the Logistics and Operations Officers o requisitioning food and drinks to the emergency site o implementing food and/or water rationing, as necessary o recording food provision activities for post-emergency follow-up o maintaining a log	Operational Node
NS - JEOC - Liaison Officers	Liaison Officers may represent federal government or non-governmental organizations. They may include representatives from other provinces or states, the Red Cross, the Department of National Defence, etc.	Operational Node

	Liaison Officers represent their agency interests in the EOC and will o obtain briefings from the Planning Officer o establish and maintain contact with their own agencies o respond to requests from the emergency management staff for inter-organizational contacts o monitor emergency operations to identify current or potential inter-organizational problems o maintain a log	
NS - JEOC - Lodging Officer	The Lodging Officer will locate, establish, and mobilize the accommodations required to support the emergency response. The leader will coordinate basic accommodation supplies such as beds, bedding and sanitation items. Specific tasks and responsibilities may include o obtaining briefing from the Logistics Officer o participating in logistics staff planning activities o determining requirements for accommodations o locating facilities for accommodations and coordinating their use o managing facilities as required o coordinating facility maintenance services as required o maintaining records of facility use for post-emergency follow-up o maintaining a log	Operational Node
NS - JEOC - Logistics Officer	The Logistics Officer coordinates the facilities, services, and materials required to support the emergency response. This person helps develop the emergency action plan and activates and supervises the sections of the logistics staff. Specific tasks and responsibilities may include o obtaining briefings from the Operations Director o organizing logistics staff o assembling and briefing section leaders, agency representatives, and appropriate technical specialists as required o participating in the preparation of the emergency action plan o identifying service and support requirements for emergency operations o reviewing communications, medical, and transportation/traffic plans o implementing support elements of the emergency action plan o maintaining a log	Operational Node
NS - JEOC - Operations Director	The Operations Director ensures that all agency representatives in an emergency receive direction and support and meet established priorities. The Operations Director manages resources and coordinates operations conducted in an emergency response. The Operations Director also serves as the principal executive authority to assess and make decisions based on information collected and submitted by the operational support staff. Specific duties and tasks include o supervising the conduct of operations o briefing the PEAT and executive management on the conduct of operations o assessing needs and requesting additional resources o maintaining a log	Operational Node
NS - JEOC - Operations Officer	The Operations Officer supports the Operations Director at the EOC in coordinating all activities related to the immediate operational management of the emergency. Specific duties include o receiving and recording incoming information from established sources and taking action to coordinate such information with other operations field staff, as required	Operational Node

	o resolving operational problems o preparing written messages, written or verbal briefings, and situation summaries o briefing incoming relief operations staff to the degree necessary to ensure effective continuity of operations o maintaining a log	
NS - JEOC - PIO	The Public Information Officer develops and releases information about the emergency to the public through news media and other appropriate agencies and organizations. Specific tasks and responsibilities include o monitoring ongoing activity and obtaining briefings from the Operations Director to remain current with events as they occur o ensuring public information activity is coordinated o establishing a public information centre whenever possible preparing an initial information summary as soon as possible after arrival at the EOC o briefing the news media and posting information in the command post and other appropriate locations o attending meetings and briefings to update information releases o maintaining a log	Operational Node
NS - JEOC - Planning Officer	The Planning Officer and staff provide information about the incident. This information includes both resource and situation status reports. Responsibilities include o obtaining briefings from the Operations Director o maintaining accurate resource status o gathering and analyzing situation data o providing displays of situation status o estimating future probabilities o preparing alternative strategies o conducting planning meetings o compiling and distributing approved action plans o maintaining a log	Operational Node
NS - JEOC - Specialists	Specialists work in the planning section and can come from departments and agencies with particular expertise in the emergency being managed or from non-governmental agencies. They supply technical advice and assistance to the planning officer so that appropriate plans or operational reports may be developed.	Operational Node
NS - JEOC - Support Staff	Operational Support Staff assist all operations and planning staff to provide information about the current situation. They update situation displays, provide clerical and documentation assistance in the EOC, and track resource availability and employment.	Operational Node
NS - JEOC - Telecommunication Officer	The Telecommunications Officer develops and implements plans for the effective use of emergency telecommunications personnel, equipment, and facilities. This officer will manage the flow of information in the EOC. The Telecommunications Officer works under the authority of the Operations Officer. Specific tasks and responsibilities include o obtaining briefings from the Operations Director o advising on communications capabilities and/or limitations o preparing and implementing the emergency telecommunications plan and other telecommunications	Operational Node

	or electronics plans that may be required o establishing the EOC telecommunications message centre and establishing operating procedures o determining personnel requirements to staff EOC telecommunications o supervising telecommunications activities in the EOC and establishing control of operating nets from the EOC o maintaining telecommunications equipment records as required o maintaining a log	
NS - JEOC - Transportation Officer	The Transportation Officer plans and coordinates ground and air transportation for emergency response organizations and victims as well as for personnel, supplies, food, water, equipment, fuel, maintenance vehicles and other ground support equipment. Specific tasks and responsibilities may include o obtaining briefings from the Logistics Director o participating in planning activities o implementing traffic plans o maintaining status report on vehicles o coordinating transportation resources, refueling, and maintenance and repair operations o tracking rented or borrowed resources o requisitioning maintenance and repair supplies o coordinating road, airfield, or other infrastructure construction as required o maintaining a log	Operational Node
NS - Lead Minister		Operational Node
NS - Manager, Media Centre	o managing the provincial media centre, including staffing, supplies, security, equipment, media accreditation, and logistics o ensuring that news release delivery system is operational o arranging tours of the emergency site o notifying media of news conferences and briefings, including all news releases, updates, and related available information o staffing and arranging shifts and staff orientation o coordinating logistics for news conferences o providing information to the Public Inquiries Coordinator for release to the public in conjunction with release to the media o arranging for meals and accommodations (as necessary) for communications and support staff o assigning photographers and videographers to the emergency area (circumstances permitting), news conferences, and briefings, as required o coordinating and establishing the site information office o logging all news releases, media requests, and related information	Operational Node
NS - Manager, Public Inquiry Centre	o managing the public inquiry centre, including staffing, supplies, forms, information sheets and relevant brochures, or information pertaining to the type of emergency o coordinating the publication of the public inquiry telephone number with the manager of the media centre	Operational Node

	o facilitating information flow, ensuring that all emergency-related information is forwarded to the Director of Emergency Public Information o liaising with the Canadian Red Cross inquiry centre and establishing procedures for processing queries about friends and relatives o ensuring that appropriate forms are completed for every call and maintaining a log of all requests	
NS - NSDEL	In the plan, the NSDEL is responsible for the following: o monitoring incoming reports and evaluating the possible impact of reported pollution incidents o where necessary, arranging the deployment of NSDEL personnel to monitor the response to a spill or release o where necessary, recruiting other agencies, industrial groups, or scientific groups to play their appropriate roles in support of the response operations o providing assistance or advice, as required, to the Emergency Site Manager (ESM) o taking samples and collecting relevant evidence should legal action be anticipated by NSDEL o assuming the responsibility for the costs of cleanup operations in the event an inadequate or no response is implemented by the polluter or another authority o actively participating within the Regional Environmental Emergencies Team (REET) when necessary	Operational Node
NS - PEAT	Provincial Emergency Activation Team (PEAT) provides interdepartmental oversight and governance to the emergency management process and is the decision-making body for establishing priorities and resolving resource conflicts.	Operational Node
NS - Premier		Operational Node
NS - Provincial Cabinet		Operational Node
NS - Supervisor, Media Monitoring	o managing the monitoring of print and electronic media to ensure that comprehensive coverage is provided and forwarded to the appropriate personnel o providing news summaries, transcripts, and tapes of radio and television coverage o advising the Associate Director of Public Information immediately of any errors in broadcasts	Operational Node
NSA --> Cabinet	National Security Advisor to Cabinet interface.	Need Line
NSA Provides EM Guidelines		Operational Activity
ON		Operational Node
Ongoing Monitoring of Responder Safety and Health	Upon assignment of responders to the incident, maintain continuous monitoring of responder safety and health, proper functioning of PPE and equipment, and awareness of on-site hazards; oversee decontamination; document all actions and injuries/illnesses; and provide for emergency and psychological medical care	Operational Activity
Operate at Level 1 - coordinate response to minor emergencies		Operational Activity

Operate at Level 2 - partial augmentation by prime/support LOs and SMEs		Operational Activity
Operate at Level 3 - extensive augmentation with prime/support LOs and SMEs		Operational Activity
Operate Evacuation Staging/Reception Area	In coordination with mass care, medical, and other service agencies, provide immediate basic needs and processing of evacuated individuals en route to other destinations (e.g., to shelters, hospitals, etc.)	Operational Activity
Operations		Operational Activity
Orders lifted?		Operational Activity
Organize Volunteers and Assign Them to Disaster Relief Efforts	Gather and provide information to efficiently refer volunteers to assigned organizations and agencies per developed tactical plans.	Operational Activity
Ottawa		Operational Node
Oversee Government of Canada emergency response		Operational Activity
Oversee regional coordination of federal regional response		Operational Activity
P --> P/T	Members of the Public (including observers) to Provincial/Territorial interface	Need Line
P/T --> I	Provincial/Territorial to Industry interface	Need Line
P/T --> M	Provincial/Territorial to Municipal interface	Need Line
P/T --> Media	Provincial/Territorial to Media interface	Need Line
P/T --> NGO	Provincial/Territorial to Non-Government Organisation interface	Need Line
P/T --> PS-Regional LO	Provincial/Territorial to Public Safety Canada Regional Liaison Officer	Need Line
P/T -->GOC-Operations		Need Line
P/T EOC --> PS-Regional LO	Provincial/Territorial EOC to Public Safety Canada Regional Liaison Officer interface. This interface may involve the PS Regional LO co-location in a P/T EOC.	Need Line
P/T EOC -->GOC-Operations	Provincial/Territorial Emergency Operations Centre to GOC Operations interface	Need Line
P/T EOC-->Federal-PLD Regional LO	Provincial EOC to Federal Primary Lead Department Regional Liaison Officer interface. This interface may involve the PLD Regional LO co-location in a P/T EOC.	Need Line
P/T Neigbouring-->P/T-EOC	Provincial/Territorial Neighbouring P/T Emergency Operations Centre to Provincial/Territorial Emergency Operations Centre interface	Need Line
P/T--> F	Provincial/Territorial to Federal interface	Need Line
P/T--> PS Canada	Provincal/Territorial to Public Safety Canada interface	Need Line
P/T-->IG	Provincial/Territorial to International Governments interface. This is primary with the US due to neighbouring issues along the common border.	Need Line
P/T-EOC -->Municipal LO	Provincial/Territorial Emergency Operations Centre to Provincial Municipal Emergency Operations Centre Liaison Officer interface	Need Line
P/T-EOC-->Federal-PLD Regional LO	Provincial Emergency Operations Centre to Federal Primary Lead Department Regional Liaison Officer interface	Need Line
P/T-EOC-->GOC-Logistics	Provincial/Territorial Emergency Operations Centre to GOC Logistics interface	Need Line
P/T-EOC-->Industry	Provincial/Territorial Emergency Operations Centre to Industry interface	Need Line

P/T-EOC-->Media	Provincial/Territorial Emergency Operations Centre to Media interface	Need Line
P/T-EOC-->NGO	Provincial/Territorial Emergency Operations Centre to Non-Government Organisation interface	Need Line
P/T-EOC-->P/T Neighbouring	Provincial/Territorial Emergency Operations Centre to Provincial/Territorial Neighbouring P/T Emergency Operations Centre interface	Need Line
P/T-EOC-->P/T-EOCG	Provincial/Territorial Emergency Operations Centre to Provincial/Territorial Emergency Operations Control Group interface	Need Line
P/T-EOC-->Provincial-LD EOC LO	Provincial Emergency Operations Centre to Provincial Lead Department Emergency Operations Centre Provincial Liaison Officer interface	Need Line
P/T-EOC-->Provincial-SD EOC	Provincial/Territorial Emergency Operations Centre to Provincial Support Department Emergency Operations Centre interface	Need Line
P/T-EOCG-->P/T-EOC	Provincial/Territorial Emergency Operations Control Group to Provincial/Territorial Emergency Operations Centre interface	Need Line
PCO --> PM	Privy Council Office to Prime Minister interface	Need Line
PHAC	Chief Public Health Office	Operational Node
PHAC - CEPR		Operational Node
PHAC - CEPR Office of the Director General		Operational Node
PHAC - Chief PHO		Operational Node
PHAC - CTCHIN		Operational Node
PHAC - GPHIN		Operational Node
PHAC - Joint NBC Coy		Operational Node
PHAC - Laboratory		Operational Node
PHAC - Minister		Operational Node
Plan for Public Safety and Security Response.	Activity: Plan for Public Safety and Security Response During Large-Scale, All-Hazards Events Definition: Review existing and/or develop new strategies, plans, procedures, programs, or systems to respond to large-scale, all-hazards events	Operational Activity
Planning		Operational Activity
PM --> Cabinet	Prime Minister to Cabinet interface.	Need Line
PM --> PCO	Prime Minister to Privy Council Office interface	Need Line
Prepare and Distribute Food	Prepare and distribute meals to affected general populations	Operational Activity
Prevent - Counter-Terror Investigation and Law Enforcement		Operational Activity
Prevent Capability Mission Area		Operational Activity
Prime Minister	The Prime Minister of Canada establishes polices and priorities, coordinates and directs government activities, and liaises with other heads of government.	Operational Node
Privy Council Office	The Privy Council Office (PCO) provides essential advice and support to the Prime Minister and Cabinet. Our goal is to help the Government of Canada serve Canada and Canadians.	Operational Node

Protect - Epidemiological Surveillance and Investigation		Operational Activity
Protect - Food and Agriculture Safety and Defense		Operational Activity
Protect - Laboratory Testing		Operational Activity
Provide advice to Cabinet		Operational Activity
Provide advice to PM		Operational Activity
Provide Animal Welfare	Provide affected animals with veterinarian care, husbandry services, food, and sheltering to minimize suffering while being isolated, quarantined, or undergoing treatment	Operational Activity
Provide appropriate access controls, security staff and equip (passes, etc)		Operational Activity
Provide communications advice		Operational Activity
Provide direction to ADM Emergency Management Committee		Operational Activity
Provide direction to content and substance of ministerial briefings		Operational Activity
Provide direction to Federal Coordinating Officer		Operational Activity
Provide direction to officials in GOC through DG OD		Operational Activity
Provide direction to public communications		Operational Activity
Provide direction to senior officials		Operational Activity
Provide direction, information, and/or support	Provide direction, information, and/or support as appropriate to IC/UC), and/or EOC/MACC/IOF	Operational Activity
Provide EM for Federal Primary Lead Department		Operational Activity
Provide EM for Federal Supporting Department		Operational Activity
Provide Environmental Health Support to Mass Care Response	Conduct health assessments and take actions necessary to ensure that mass care facilities provide safe food, water, sanitation, and environment	Operational Activity
Provide Environmental Health Support to Solid Waste/Debris Removal	Conduct health assessments and take actions necessary to ensure that solid waste management and debris removal activities are conducted in a manner that protects public and environmental safety	Operational Activity
Provide Environmental Health Support..	Activity: Provide Environmental Health Support to Hazardous Materials Management/Decontamination	Operational Activity

	Definition: Conduct health assessments and take actions necessary to ensure that hazardous materials management and decontamination activities are conducted in a manner that protects public and environmental safety	
Provide EOC Connectivity	Upon identification of issues, establish priorities between Incident and/or Area Commands; provide strategic direction; coordinate and resolve multi-agency policy issues, including the issuance of protective action recommendations and protective action decisions.	Operational Activity
Provide EOC Connectivity Critical Tasks		Operational Activity
Provide guidance to NSA		Operational Activity
Provide hazard analysis and probability assessment		Operational Activity
Provide information, advice and recommendations to the PM		Operational Activity
Provide input to GOC management team re support needs (RFA)		Operational Activity
Provide intial response to events of national interest		Operational Activity
Provide legal advice to GOC management		Operational Activity
Provide link to home department		Operational Activity
Provide local purchase ordering		Operational Activity
Provide mailroom and messenger services		Operational Activity
Provide Materiel and Other Support	Upon arriving on scene, provide, track, and maintain equipment and supplies as well as support base of operations	Operational Activity
Provide Medical Treatment	Upon access to victim, coordinate with medical personnel to treat and transfer victim to more definitive medical care	Operational Activity
Provide news reports		Operational Activity
Provide news reports to public		Operational Activity
Provide news reports to the public		Operational Activity
Provide office administrative support		Operational Activity
Provide office equipment and supplies		Operational Activity
Provide Planning Guidance to GOC - Planning		Operational Activity
Provide primary means for consultation, planning, advice and management of RFAs		Operational Activity

Provide Public Rumor Control	Upon activation of the JIC/JIS, track inquiries for rumors	Operational Activity
Provide regional context and input into public coms products		Operational Activity
Provide regional direction		Operational Activity
Provide resouce status/availability to GOC		Operational Activity
Provide resource status		Operational Activity
Provide Risk Assessment Report to DG OD for PS Canada		Operational Activity
Provide strategic public communications advice		Operational Activity
Provide support to GOC as required		Operational Activity
Provide support to PS - DG OD		Operational Activity
Provide support to public coms activities on the ground/site		Operational Activity
Provide Treatment	Provide medical treatment appropriate to the patient's injuries and the incident	Operational Activity
Provide Vector Surveillance	After vector is identified, mobilize and equip control personnel with appropriate personal protective equipment and direct control strategies and application of vector control substances	Operational Activity
Province EOC receives Sit Rep from GOC SA		Operational Activity
Provincial - Attorney General	Provincial - Attorney General is a provincial government department responsible for the oversight of the justice system.	Operational Node
Provincial - Cabinet		Operational Node
Provincial - EMO	Provincial Emergency Management Organisation - EMO will lead the coordination, development and implementation of prevention, mitigation, preparedness, response and recovery strategies for emergency management in the province/territory.	Operational Node
Provincial - EOC	Provincial Emergency Operations Centre. In generic representation, the Provincial EOC will contain Operations, Planning, Logistics, Communications and Finance and Administration cells.	Operational Node
Provincial - EOC Duty Officer		Operational Node
Provincial - EOCG	Provincial - Emergency Operations Control Group provides overall direction and control of the EMO	Operational Node
Provincial - Health Authority	Provincial - Health Authority oversees and co-ordinates the delivery of health services in the province through a variety of provincial, regional and local organizations.	Operational Node
Provincial - LD	Provincial Lead Department is a provincial department designated to lead the emergency response. Depending on the nature of the emergency, there may be multiple lead departments.	Operational Node
Provincial - LD EOC	Provincial Primary Lead Department Emergency Operations Centre. In generic	Operational

	representation, the EOC will contain Operations, Planning, Logistics, Communications and Finance and Administration cells.	Node
Provincial - LD EOC LO		Operational Node
Provincial - LD IC		Operational Node
Provincial - LD Regional Office	Provincial Regional Office of the Lead Department located in a municipality	Operational Node
Provincial - LD Regional Office LO	Regional Liaison Office for the Provincial Lead Department - has a presence in the municipal EOC.	Operational Node
Provincial - Municipal LO	Municipal Liaison Office for the Provincial EMO - has a presence in the municipal EOC.	Operational Node
Provincial - Neighbouring Province/Territory	Neighbouring Provinces/Territories may provide support or assistance to the affected Province/Territory.	Operational Node
Provincial - OGD	Provincial Other Government Department not involved in the emergency response.	Operational Node
Provincial - Police	Provincial - Police - provincial law enforcement organisation and are members of the first responder community.	Operational Node
Provincial - Premier	Premier is the head of government of a province or territory. There are currently ten provincial premiers and three territorial premiers in Canada.	Operational Node
Provincial - SD	Provincial Supporting Departments is a provincial government department who provides general or specialised assistance to a lead department in responding to an emergency. Depending on the nature of the emergency, there may be multiple supporting departments.	Operational Node
Provincial - SD EOC	Provincial Support Department Emergency Operations Centre. In generic representation, the EOC will contain Operations, Planning, Logistics, Communications and Finance and Administration cells.	Operational Node
Provincial - SD Regional Office	Provincial Regional Office of the Supporting Departments located in a municipality	Operational Node
Provincial --> GOC		Need Line
Provincial declares state of emergency		Operational Activity
Provincial emergency response complete		Operational Activity
Provincial EOCG-->Premier	Provincial Emergency Operations Control Group to Premier interface	Need Line
Provincial jurisdictions affected increase		Operational Activity
Provincial Manage Emergency		Operational Activity
Provincial monitor emergency		Operational Activity
Provincial provides support		Operational Activity
Provincial receives federal guidance and support		Operational Activity
Provincial Requests Federal Assistance		Operational Activity
Provincial resources overwhelmed		Operational Activity
Provincial shares information		Operational Activity
Provincial/ Territorial	Canada has a federal system with three orders of government. The largest is the	Operational

	federal government, followed by the provincial and territorial governments. At the root level is the municipal (or local) government.	Node
Provincial/ Territorial - EOC	Provincial Emergency Operations Centre. In generic representation, the Provincial EOC will contain Operations, Planning, Logistics, Communications and Finance and Administration cells.	Operational Node
Provincial-LD EOC --> Provincial-	Provincial Lead Department Emergency Operations Centre to Provincial Support Department Emergency Operations Centre interface	Need Line
Provincial-LD EOC LO--> P/T-EOC	Provincial Lead Department Emergency Operations Centre Provincial Liaison Officer to Provincial Emergency Operations Centre interface	Need Line
Provincial-LD EOC LO--> Provincial LD EOC	Provincial Lead Department Emergency Operations Centre Provincial Liaison Officer to Provincial Lead Department Emergency Operations Centre interface	Need Line
Provincial-LD EOC--> Provincial LD EOC LO	Provincial Lead Department Emergency Operations Centre to Provincial Lead Department Emergency Operations Centre Provincial Liaison Officer interface	Need Line
Provincial-LD EOC--> Provincial-SD EOC	Provincial/Territorial Lead Department Emergency Operations Centre to Provincial/Territorial Support Department Emergency Operations Centre interface	Need Line
Provincial-LD IC-->Public	Privincail/Territorial Lead Department Incident Commander to Public interface	Need Line
Provincial-Municipal LO--> Municipal EOC	Provincial Municipal Emergency Operations Centre Liaison Officer to Municipal Emergency Operations Centre interface	Need Line
Provincial-Municipal LO--> P/T-EOC	Provincial Municipal Emergency Operations Centre Liaison Officer to Provincial/Territorial Emergency Operations Centre interface	Need Line
Provincial-Premier--> EOCG	Provincial Premier to Emergency Operations Control Group interface	Need Line
Provincial-SD EOC-->P/T-EOC	Provincial Support Department Emergency Operations Centre to Provincial/Territorial Emergency Operations Centre interface	Need Line
Provincial-SD EOC--> Provincial-LD EOC	Provincial/Territorial Support Department Emergency Operations Centre to Provincial/Territorial Lead Department Emergency Operations Centre	Need Line
PS - ADG CD	Public Safety Canada Associate Director General, Communications Directorate	Operational Node
PS - ADG OD	Public Safety Canada Associate Director General of the Operations Directorate	Operational Node
PS - CD	Public Safety Canada Communications Directorate	Operational Node
PS - DG OD	Public Safety Canada Director General Operations Directorate	Operational Node
PS - FCO	Public Safety Federal Coordinating Officer - PS DM or PS Senior ADM	Operational Node
PS - Federal Regional Component	Public Safety Canada Regional Component assists in coordination for a single-window regional response.	Operational Node
PS - Minister		Operational Node
PS - OD	Public Safety Canada Operations Directorate - manage functions of FERMS as coordinating department	Operational Node
PS - Regional Director		Operational Node
PS - Regional FCC	Public Safety Canada Regional Federal Coordination Centre is the 24/7 emergency operations facility for federal departments in the region.	Operational Node
PS - Regional FCG	Public Safety Canada Regional Federal Coordination Group is a permanent/standing committee composed of emergency management managers from federal departments in the region, chaired by PS - Regional Director.	Operational Node
PS - Regional FCSC	Public Safety Canada Regional Federal Coordination Steering Committee is chaired by the PS - Regional Director. IT is a permanent steering committee of senior regional federal department representatives.	Operational Node
PS - Regional Federal LO	Public Safety Canada Regional Federal Liaison Officer represents the PS -	Operational

	Regional Director in the provincial/territorial EOC and is the link to the GOC and the regional FCC.	Node
PS - Regional FPCCG	Public Safety Canada Regional Federal Public Communications Coordination Group coordinates the government's pubic communications response to the public, media and affected stakeholders. It is composed of federal public communicators from affected federal departments, who work together and in partnership with the provinces/territories.	Operational Node
PS - Regional Office	Public Safety Canada Regional Offices interface with provinces/territories and province day-to-day coordination of regional emergency management activities.	Operational Node
PS - Technical Advisory Group		Operational Node
PS Canada	Public Safety Canada is the federal coordinating department based on the legislated responsibility of the Minister of Public Safety under the Emergency Management Act. As such, PS Canada is responsible for engaging relevant federal departments in an integrated Government of Canada response to an emergency.	Operational Node
PS Canada --> ADM EMC	Public Safety Canada to Assistant Deputy Minsters' Emergency Management Committee interface	Need Line
PS Canada --> Federal - PLD	Public Safety Canada to Federal Primary Lead Department interface	Need Line
PS Canada --> Federal SD	PS Canada to Federal Supporting Department interface.	Need Line
PS Canada --> GOC	Public Safety Canada to GOC interface	Need Line
PS Canada --> Media	Public Safety Canada to Media interface	Need Line
PS Canada --> P/T	Public Safety Canada to Public Safety Canada interface.	Need Line
PS Canada -> PS - DG OD		Need Line
PS DG OD --> GOC Planning	Public Safety Canada Director General Operations Directorate to GOC Planning interface	Need Line
PS FCC emergency response		Operational Activity
PS-ADG CD --> PS-Regional FPCCG	Public Safety Canada Associate Director General, Communications Directorate to Public Safety Canada Regional Federal Public Communications Coordination Group interface	Need Line
PS-ADG OD --> PS-DG OD		Need Line
PS-ADG OD-->PS-DG OD	Public Safety Canada Associate Director General, Operations Directorate to Public Safety Director General, Operations Directorate interface.	Need Line
PS-ADG-CD --> Media	Public Safety Canada Associate Director General, Communications Directorate to Media interface	Need Line
PS-DG OD consults with FCO		Operational Activity
PS-DG OD-->Federal	Public Safety Canada Director General Operations Directorate to Federal interface. This will include PS-DG OD interaction with all federal entities including PLD, SD, GOC etc.	Need Line
PS-DG OD-->PS-FCO	Public Safety Canada Director General, Oeprations Directorate to Public Safety Canada Federal Coordination Officer interface.	Need Line
PS-FCO-->GOC-Operations	Public Saftey Canada Federal Coordination Officer to GOC Operations interface.	Need Line
PS-FCO-->PS-DG OD	Public Safety Canada Federal Coordination Officer to Public Safety Canada Director General, Operations Directorate interface.	Need Line
PS-Regional --> FCO	Public Safety Federal Regional Component to Public Safety Federal Coordinating Officer interface	Need Line
PS-Regional FCC--	Public Safety Canada Regional Federal Coordination Centre to Federal interface.	Need Line

>Federal	This will include FCC interaction with all federal entities including PLD, SD, GOC etc.	
PS-Regional FCC-->Industry	Public Safety Canada Regional Federal Coordination Centre to Industry interface	Need Line
PS-Regional FCC-->NGO	Public Safety Canada Regional Federal Coordination Centre to Non-Government Organisation interface	Need Line
PS-Regional FPCCG --> Media	Public Safety Canada Regional Federal Public Communications Coordination Group to Media interface	Need Line
PS-Regional LO --> P/T	Public Safety Regional Liaison Officer to Provincial/Territorial interface	Need Line
PS-Regional LO --> P/T EOC	Public Safety Canada Regional Liaison Officer to Provincial/Territorial EOC interface. This interface may involve the PS Regional LO co-location in a P/T EOC.	Need Line
Public	Emergencies always begin at a local level and often notification of an incident is first by affected general public. The general public will also be impacted by/and or influence (via public opinion) the emergency management activities.	Operational Node
Public --> Municipal	Members of the Public to Municipal interface	Need Line
RCMP		Operational Node
RCMP - Canadian Cyber Incident Response Centre		Operational Node
RCMP - CID		Operational Node
RCMP - Commissioner		Operational Node
RCMP - Critical Incident Program		Operational Node
RCMP - DEOC		Operational Node
RCMP - Division		Operational Node
RCMP - Incident Commander		Operational Node
RCMP - Joint NBC Unit		Operational Node
RCMP - National Level Response		Operational Node
RCMP - NOC		Operational Node
Re-assess and implement EOC demobilization and deactivation plans		Operational Activity
Receive Action Plan Task Matrix approval		Operational Activity
Receive and Treat Surge Casualties	Receive mass casualties and provide appropriate clinical care	Operational Activity
Receive coms support from PS - CD		Operational Activity
Receive GOC products		Operational Activity
Receive guidance from DM NSC		Operational Activity
Receive guidance from Federal Primary Lead Department		Operational Activity

Receive guidance from Federal Supporting Department		Operational Activity
Receive plan approval		Operational Activity
Receive plan approval from PS-DG OD		Operational Activity
Receive RFA from Federal PLD		Operational Activity
Receive RFAs from GOC		Operational Activity
Recover Medical Resources	As warehousing activities diminish, activate plan to recover unused medical resources	Operational Activity
Recovery - Economic and Community Recovery		Operational Activity
Recovery - Restoration of Lifelines		Operational Activity
Rehabilitate and re-supply EOC/MACC/IOF entity/resources	Rehabilitate and re-supply EOC/MACC/IOF entity/resources to return to state of readiness	Operational Activity
Render Safe Onsite	Once on scene, establish site perimeters based on Standard Operating Procedures (SOP) and threat, conduct IED onsite response and isolate device(s) from potential remote detonation commands, clear the onsite area for render safe operations, and ensure compliance with Radiological Assistance Program, Federal Radiological Emergency Response Plan, National Response Plan for radiological IEDs	Operational Activity
Repackage and Distribute	After delivery of medical assets to warehouse facility, repackage pharmaceuticals and other assets and distribute to Points Of Distribution (PODs) and other health facilities	Operational Activity
Report emergency to public		Operational Activity
Report incident to the local authorities		Operational Activity
Report possible emergency incident		Operational Activity
Request lead department representatives through dept EOC or duty officer		Operational Activity
Request support LO or SME via dept EOC or duty officers		Operational Activity
Rescue operations		Operational Activity
Respond to 911 Call	First responders will respond to the 911 call. In most cases, the first organization on the scene will act as the municipal lead agency and incident command.	Operational Activity
Respond to Needs Assessment and Inventory	Based on tasking from the EOC/MAC per field needs assessments, determine types of resources needed to support response operations.	Operational Activity
Response C1 - On-Site Incident Management Capability	Onsite Incident Management is the capability to effectively direct and control incident activities by using the Incident Command System (ICS) consistent with the National Incident Management System (NIMS). Outcome: The event is managed safely, effectively and efficiently through the common	Operational Activity

	framework of the Incident Command System. Relationship to National Response Plan Emergency Support Function: (ESF)/Annex All Emergency Support Functions (ESFs) are coordination (resource providing) functions, thus ESFs are not involved in on-scene command. The ESFs work through coordination centers to provide the incident management organization with the resources it needs. Command is generally a local/county or State responsibility.	
Response C10 - Fire Incident Response Support Capability	Capability Definition This capability provides coordination and implementation of fire suppression operations, which include the following tasks: assessing the scene, assigning resources, establishing an incident command system (ICS) consistent with the National Incident Management System (NIMS), communicating the status of the situation, requesting additional resources, establishing a safe perimeter, evacuating persons in danger, rescuing trapped victims, conducting fire suppression, determining the cause of the fire(s), and ensuring the area is left in a safe condition. This capability further includes support necessary to prepare the community and reduce vulnerabilities in the event of a major event. Outcome Dispatch and safe arrival of the initial fire suppression resources occur within jurisdictional response time objectives. The first unit to arrive initiates the Incident Command System (ICS), assesses the incident scene, communicates the situation, and requests ppropriate resources including any necessary mutual aid or cross-discipline support. Firefighting activities are conducted safely and fire hazards are contained, controlled, extinguished, and investigated, and the incident is managed in accordance with emergency response plans and procedures. Relationship to National Response Plan Emergency Support Function (ESF)/Annex The capability supports Emergency Support Function (ESF) #4: Firefighting.	Operational Activity
Response C11- WMD and Hazardous Materials Response & Decontamination Capability	Capability Definition Weapons of Mass Destruction (WMD) and Hazardous Materials Response and Decontamination is the capability to assess and manage the consequences of a hazardous materials release, either accidental or as part of a terrorist attack. It includes testing and identifying all likely hazardous substances onsite; ensuring that responders have protective clothing and equipment; conducting rescue operations to remove affected victims from the hazardous environment; conducting geographical survey searches of suspected sources or contamination spreads and establishing isolation perimeters; mitigating the effects of hazardous materials, decontaminating on-site victims, responders, and equipment; coordinating off-site decontamination with relevant agencies, and notifying environmental, health, and law enforcement agencies having jurisdiction for the incident to begin implementation of their standard evidence collection and investigation procedures. Outcome Hazardous materials release is rapidly identified and mitigated; victims exposed to the hazard are rescued, decontaminated, and treated; the impact of the release is limited; and responders	Operational Activity

	and at-risk populations are effectively protected. Relationship to National Response Plan Emergency Support Function (ESF)/Annex This capability supports Emergency Support Function (ESF) #10: Oil and Hazardous Materials Response.	
Response C12- Citizen Evacuation and Shelter-In-Place Capability	Capability Definition Citizen evacuation and shelter-in-place is the capability to prepare for, ensure communication of, and immediately execute the safe and effective sheltering-in-place of an at-risk population (and companion animals), and/or the organized and managed evacuation of the at-risk population (and companion animals) to areas of safe refuge in response to a potentially or actually dangerous environment. In addition, this capability involves the safe reentry of the population where feasible. Outcome Affected and at-risk populations (and companion animals to the extent necessary to save human lives) are safely sheltered-in-place or evacuated to safe refuge areas. Relationship to National Response Plan Emergency Support Function (ESF)/Annex This capability is supported by the following Emergency Support Functions (ESFs): ESF #1: Transportation ESF #5: Emergency Management ESF #6: Mass Care, Housing, and Human Services ESF #8: Public Health and Medical Services ESF #14: Public Safety ESF #15: External Affairs	Operational Activity
Response C13 - Isolation and Quarantine Capability	Capability Definition Isolation and Quarantine is the capability to protect the health of the population through the use of isolation and/or quarantine measures in order to contain the spread of disease. Isolation of ill individuals may occur in homes, hospitals, designated health care facilities, or alternate facilities. Quarantine refers to the separation and restriction of movement of persons who, while not yet ill, have been exposed to an infectious agent and may become infectious. Successful implementation will require that sufficient legal, logistical, and informational support exists to maintain these measures. Most experts feel that isolation and quarantine will not stop the outbreak and that if used, the focus will be on cases that might introduce the disease into the State or other geographic area. Outcome Individuals who are ill, exposed, or likely to be exposed are separated, movement is restricted, basic necessities of life are available, and their health is monitored in order to limit the spread of a newly introduced contagious disease (e.g., pandemic influenza). Legal authority for those measures is clearly defined and communicated to all responding agencies and the public. Logistical support is provided to maintain measures until danger of contagion has elapsed. Relationship to National Response Plan Emergency Support Function (ESF)/Annex This capability supports the Emergency Support Function (ESF) #8: Public Health and Medical Services.	Operational Activity
Response C14- Search	Capability Definition	Operational

and Rescue (Land-Based) Capability	Search and Rescue (Land-based) is the capability to coordinate and conduct search and rescue (SAR) response efforts for all hazards, including searching affected areas for victims (human and, to the extent no humans remain endangered, animal) and locating, accessing, medically stabilizing, and extricating victims from the damaged area. Outcome The greatest numbers of victims (human and, to the extent that no humans remain endangered, animal) are rescued and transferred to medical or mass care capabilities, in the shortest amount of time, while maintaining rescuer safety. Relationship to National Response Plan Emergency Support Function (ESF)/Annex This capability supports the Emergency Support Function (ESF) #9: Urban Search and Rescue.	Activity
Response C15 - Emergency Public Information and Warning Capability	Capability Definition The Emergency Public Information and Warning capability includes public information, alert/warning and notification. It involves developing, coordinating, and disseminating information to the public, coordinating officials, and incident management and responders across all jurisdictions and disciplines effectively under all hazard conditions. (a) The term public information refers to any text, voice, video, or other information provided by an authorized official and includes both general information and crisis and emergency risk communication (CERC) activities. CERC incorporates the urgency of disaster communication with risk communication to influence behavior and adherence to directives. (b) The term alert refers to any text, voice, video, or other information provided by an authorized official to provide situational awareness to the public and/or private sector about a potential or ongoing emergency situation that may require actions to protect life, health, and property. An alert does not necessarily require immediate actions to protect life, health, and property and is typically issued in connection with immediate danger. (c) The term warning refers to any text, voice, video, or other information provided by an authorized official to provide direction to the public and/or private sector about an ongoing emergency situation that requires immediate actions to protect life, health, and property. A warning requires immediate actions to protect life, health, and property and is typically issued when there is a confirmed threat posing an immediate danger to the public. (d) The term notification refers to any process where Federal, State, local, tribal, and nongovernmental organization, department, and/or agency employees and/or associates are informed of an emergency situation that may require a response from those notified. Outcome Government agencies and public and private sectors receive and transmit coordinated, prompt, useful, and reliable information regarding threats to their health, safety, and property, through clear, consistent information-delivery systems. This information is updated regularly and outlines protective measures that can be taken by individuals and their communities. Relationship to National Response Plan Emergency Support Function (ESF)/Annex	Operational Activity

	This capability supports the following Emergency Support Functions (ESFs) and Annex: ESF #5: Emergency Management ESF #15: External Affairs Public Affairs Support Annex	
Response C16 - Emergency Triage and Pre-Hospital Treatment Capability	Capability Definition Emergency Triage and Pre-Hospital Treatment is the capability to appropriately dispatch emergency medical services (EMS) resources; to provide feasible, suitable, and medically acceptable pre-hospital triage and treatment of patients; to provide transport as well as medical care en-route to an appropriate receiving facility; and to track patients to a treatment facility. Outcome Emergency Medical Services (EMS) resources are effectively and appropriately dispatched and provide pre-hospital triage, treatment, transport, tracking of patients, and documentation of care appropriate for the incident, while maintaining the capabilities of the EMS system for continued operations. Relationship to National Response Plan Emergency Support Function (ESF)/Annex This capability supports the following Emergency Support Functions (ESFs): ESF #1: Transportation ESF #8: Public Health and Medical Services ESF #9: Urban Search and Rescue ESF #10: Oil and Hazardous Materials Response	Operational Activity
Response C17 - Medical Surge Capability	Capability Definition Medical Surge is the capability to rapidly expand the capacity of the existing healthcare system (longterm care facilities, community health agencies, acute care facilities, alternate care facilities and public health departments) in order to provide triage and subsequent medical care. This includes providing definitive care to individuals at the appropriate clinical level of care, within sufficient time to achieve recovery and minimize medical complications. The capability applies to an event resulting in a number or type of patients that overwhelm the day-to-day acute-care medical capacity. Planners must consider that medical resources are normally at or near capacity at any given time. Medical Surge is defined as rapid expansion of the capacity of the existing healthcare system in response to an event that results in increased need of personnel (clinical and non-clinical), support functions (laboratories and radiological), physical space (beds, alternate care facilities) and logistical support (clinical and non-clinical equipment and supplies). Outcome Injured or ill from the event are rapidly and appropriately cared for. Continuity of care is maintained for non-incident related illness or injury. Relationship to National Response Plan Emergency Support Function (ESF)/Annex This capability supports Emergency Support Function: (ESF) #8: Public Health and Medical Services.	Operational Activity
Response C18 - Medical Supplies Management and Distribution Capability	Capability Definition Medical Supplies Management and Distribution is the capability to procure and maintain pharmaceuticals and medical materials prior to an incident and to	Operational Activity

	transport, distribute, and track these materials during an incident. Outcome Critical medical supplies and equipment are appropriately secured, managed, distributed, and restocked in a timeframe appropriate to the incident. Relationship to National Response Plan Emergency Support Function (ESF)/Annex This capability supports the following Emergency Support Functions (ESFs): ESF #1: Transportation ESF #2: Communications ESF #5: Emergency Management ESF #7: Resource Support ESF #8: Public Health and Medical Services ESF #13: Public Safety and Security ESF #14: Long-Term Community Recovery and Mitigation ESF #15: External Affairs	
Response C19 - Mass Prophylaxis Capability	Capability Definition Mass Prophylaxis is the capability to protect the health of the population through the administration of critical interventions in response to a public health emergency in order to prevent the development of disease among those who are exposed or are potentially exposed to public health threats. This capability includes the provision of appropriate follow-up and monitoring of adverse events, as well as risk communication messages to address the concerns of the public. Outcome Appropriate drug prophylaxis and vaccination strategies are implemented in a timely manner upon the onset of an event to prevent the development of disease in exposed individuals. Public information strategies include recommendations on specific actions individuals can take to protect their family, friends, and themselves. Relationship to National Response Plan Emergency Support Function (ESF)/Annex This capability supports the Emergency Support Function: (ESF) #8: Public Health and Medical Services	Operational Activity
Response C2- Emergency Operations Center Management Capability	Emergency Operations Center (EOC) Management is the capability to provide multi-agency coordination (MAC) for incident management by activating and operating an EOC for a pre-planned or no-notice event. EOC management includes EOC activation, notification, staffing, and deactivation; management, direction, control, and coordination of response and recovery activities; coordination of efforts among neighboring governments at each level and among local, regional, State, and Federal EOCs; coordination public information and warning; and maintenance of the information and communication necessary for coordinating response and recovery activities. Similar entities may include the National (or Regional) Response Coordination Center (NRCC or RRCC), Joint Field Offices (JFO), National Operating Center (NOC), Joint Operations Center (JOC), Multi-Agency Coordination Center (MACC), Initial Operating Facility (IOF), etc. Outcome: The event is effectively managed through multi-agency coordination for a pre-planned or no-notice event. Relationship to National Response Plan Emergency Support Function	Operational Activity

	(ESF)/Annex This capability supports Emergency Support Function (ESF) #5: Emergency Management.	
Response C20 - Mass Care Capability	Capability Definition Mass Care is the capability to provide immediate shelter, feeding centers, basic first aid, bulk distribution of needed items, and related services to persons affected by a large-scale incident. Mass Care is usually provided by nongovernmental organizations (NGOs), such as the American Red Cross, or by local government. The capability also provides for companion animal care/handling through local government and appropriate animal-related organizations. Functional and Medical Support Shelters (formerly known as Special Needs Shelters) are addressed as a separate capability. However, this capability does cover those individuals who have disabilities that can be accommodated in general population shelters. These individuals could include the following: .. A person requiring medication, Consumable Medical Supplies ([CMS], such as hearing aid batteries, incontinence supplies), or Durable Medical Equipment ([DME], such as wheelchairs, walkers, canes, etc); .. A person with a stable medical or psychiatric condition; .. A person who requires a caregiver where the regular caregiver can stay with the person; .. A person requiring assistance with transferring from a wheelchair to a cot where the assistance does not require specialized training or lifting equipment; .. A person requiring oxygen who is mobile and does not require medical attention; or .. A person needing assistance with some activities of daily living such as cutting of food. This list does not include all accommodations that can be made in a general population shelter, but each shelter will have different capabilities based on location and available facilities at the time of the disaster Outcome Mass care services, including sheltering, feeding, and bulk distribution, are rapidly provided for the population and companion animals within the affected area. Relationship to National Response Plan Emergency Support Function (ESF)/Annex This capability supports the following Emergency Support Functions (ESFs): ESF #6: Mass Care, Housing, and Human Services	Operational Activity
Response C21 - Fatality Management Capability	Capability Definition Fatality Management is the capability to effectively perform scene documentation; the complete collection and recovery of the dead, victim's personal effects, and items of evidence; decontamination of remains and personal effects (if required); transportation, storage, documentation, and recovery of forensic and physical evidence; determination of the nature and extent of injury; identification of the fatalities using scientific means; certification of the cause and manner of death; processing and returning of human remains and personal effects of the victims to the legally authorized person(s) (if possible); and interaction with and provision of legal, customary, compassionate, and culturally competent required services to the families of deceased within the context of the family assistance center. All activities should be sufficiently documented for admissibility in criminal and/or civil courts. Fatality management activities also need to be incorporated in the surveillance and intelligence sharing networks, to identify sentinel cases of bioterrorism and other public health threats. Fatality management operations are conducted through a unified command structure	Operational Activity

	Outcome Complete documentation and recovery of human remains and items of evidence (except in cases where the health risks posed to personnel outweigh the benefits of recovery of remains). Remains receive surface decontamination (if indicated) and, unless catastrophic circumstances dictate otherwise, are examined, identified, and released to the next-of-kin's funeral home with a complete certified death certificate. Reports of missing persons and ante mortem data are efficiently collected. Victims' family members receive updated information prior to the media release. All hazardous material regulations are reviewed and any restrictions on the transportation and disposition of remains are made clear by those with the authority and responsibility to establish the standards. Law enforcement agencies are given all information needed to investigate and prosecute the case successfully. Families are provided incident specific support services. Relationship to National Response Plan ESF Annex This capability supports the following Emergency Support Functions (ESFs): ESF #4: Firefighting ESF #8: Public Health and Medical Services ESF #9: Urban Search and Rescue ESF #10: Oil and Hazardous Materials Response ESF #13: Public Safety and Security	
Response C3- Critical Resource Logistics and Distribution Capability	Capability Definition: Critical Resource Logistics and Distribution is the capability to identify, inventory, dispatch, mobilize, transport, recover, and demobilize and to accurately track and record available human and material critical resources throughout all incident management phases. Critical resources are those necessary to preserve life, property, safety, and security. Outcome Critical resources are available to incident managers and emergency responders upon request for proper distribution and to aid disaster victims in a cost-effective and timely manner. Relationship to National Response Plan Emergency Support Function/Annex The capability supports the following Emergency Support Functions (ESFs): ESF #1: Transportation ESF #2: Communications ESF #3: Public Works and Engineering ESF #4: Firefighting ESF #5: Emergency Management ESF #6: Mass Care, Housing, and Human Services ESF #7: Resource Support ESF #8: Public Health and Medical Services ESF #9: Urban Search and Rescue ESF #10: Oil and Hazardous Materials Response ESF #11: Agriculture and Natural Resources ESF #12: Energy ESF #13: Public Safety and Security ESF #14: Long-Term Community Recovery and Mitigation ESF #15: External Affairs	Operational Activity
Response C4- Volunteer Management and Donations Capability	Volunteer Management and Donations is the capability to effectively coordinate the use of volunteers and donations in support of domestic incident management.	Operational Activity

	Outcome The positive effect of using volunteers and donations is maximized to augment incident operations. Relationship to National Response Plan Emergency Support Function (ESF)/Annex The capability supports the following Emergency Support Functions (ESFs): Volunteer and Donations Management Support Annex ESF #6: Mass Care, Housing and Human Services	
Response C5- Responder Safety and Health Capability	Capability Definition Responder Safety and Health is the capability that ensures adequate trained and equipped personnel and resources are available at the time of an incident to protect the safety and health of on scene first responders, hospital/medical facility personnel (first receivers), and skilled support personnel through the creation and maintenance of an effective safety and health program. This program needs to comply with the Occupational Safety and Health Administration's (OSHA) "HAZWOPER" standard (29 CFR 1910.120, as implemented by EPA or State authorities) and any other applicable Federal and State regulations. The program also needs to be integrated into the Incident Command System (ICS) and include training, exposure monitoring, personal protective equipment, health and safety planning, risk management practices, medical care, decontamination procedures, infection control, vaccinations for preventable diseases, adequate work-schedule relief, psychological support, and follow-up assessments. This capability identifies the critical personnel, equipment, training, and other resources needed to ensure that all workers are protected from all hazards, including fire (heat and products of combustion), CBRNE (chemical, biological, radiological, nuclear, or explosive) materials, electrical hazards, collapsed structures, debris, acts of violence, and others. The Responder Safety and Health capability is a critical component of safe overall emergency management. First responders include police, fire, emergency medical services (EMS), and other emergency personnel, as well as emergency management, public health, clinical care, public works, and other skilled support personnel (such as equipment operators). This extended definition includes a very broad set of workers and a wide range of likely response-related activities, resulting in an increased number of potential hazards and exposures. Building the ability to protect all responders from all hazards is a substantial undertaking that involves prevention, preparedness, response, and recovery efforts. This capability supports both the Safety Officer position identified in the National Incident Management System (NIMS)/incident command system (ICS) and the Worker Safety and Health Support Annex to the National Response Plan (NRP). The Type 1 Safety Officer described in this capability has yet to be fully defined (to include managing all of the hazards that first responders are likely to face), but the concept used is the same as the "Disaster Safety Manager" described in Protecting Emergency Responders: Safety Management in Disaster and Terrorism Response (NIOSH, 2004). In addition, the list of services that are critical for this capability is consistent with the actions specified under the Worker Safety and Health Support Annex and in the Guidelines for hazmat/WMD Response, Planning and Prevention Training (FEMA, 2003). During the response to any incident, employers are responsible primarily for the safety and health of their employees. However, the ICS creates a unified safety and health organization under the Safety Officer. In large-scale incidents, because of the number and varieties of hazards and workers, the Safety Officer would be used more as a Safety Manager. This technical capability therefore does not prescribe a	Operational Activity

	certain level of preparedness for any particular organization; rather, it specifies the need for personal protective equipment (PPE), Safety Officers, and so forth and allows local entities to determine the best way to obtain the needed resources (e.g., through mutual aid, State resources, or Federal resources) for the first 72 hours from the "initial response" operations. Outcome No illnesses or injury to any first responder, first receiver, medical facility staff member, or other skilled support personnel as a result of preventable exposure to secondary trauma, chemical/radiological release, Relationship to National Response Plan Emergency Support Function (ESF)/Annex This capability supports the following Emergency Support Functions (ESFs) and Annex: ESF #3: Public Works and Engineering ESF #5: Emergency Management ESF #6: Mass Care, Housing, and Human Services ESF #8: Public Health and Medical Services ESF #9: Urban Search and Rescue ESF #10: Oil and Hazardous Materials Response ESF #11: Agricultural and Natural Resources ESF #12: Energy ESF #13: Public Safety and Security Worker Safety and Health Support Annex	
Response C6- Emergency Public Safety and Security Response Capability	Capability Definition Emergency Public Safety and Security Response is the capability to reduce the impact and consequences of an incident or major event by securing the affected area, including crime/incident scene preservation issues as appropriate, safely diverting the public from hazards, providing security support to other response operations and properties, and sustaining operations from response through recovery. Public Safety and Security Response requires coordination among officials from law enforcement, fire, and emergency medical services (EMS). Outcome The incident scene is assessed and secured; access is controlled; security support is provided to other response operations (and related critical locations, facilities, and resources); emergency public information is provided while protecting first responders and mitigating any further public risks; and any crime/incident scene preservation issues are addressed. Relationship to National Response Plan Emergency Support Function (ESF)/Annex This capability supports Emergency Support Function (ESF) #13: Public Safety and Security.	Operational Activity
Response C7- Animal Disease Emergency Support Capability	Capability Definition Animal Disease Emergency Support is the capability to protect, prevent, detect, respond to, and recover from threats and incidents that would result in the disruption of industries related to U.S. livestock, other domestic animals (including companion animals) and wildlife and/or endanger the food supply, public health, and domestic and international trade. It includes the ability to respond to large-scale national and regional emergencies as well as to smaller-scale incidents through	Operational Activity

	rapid determination of the nature of the event, initiation of the appropriate response, containment of the disrupting effects, and facilitation of recovery. Outcome Foreign animal disease is prevented from entering the United States by protecting the related critical infrastructure and key assets. In the event of an incident, animal disease is detected as early as possible, exposure of livestock to foreign diseases is reduced, immediate and humane actions to eradicate the outbreak are implemented, public and animal health and the environment are protected, continuity of agriculture and related business is safely maintained and/or restored, and economic damage is minimized. Trade in agricultural products and domestic and international confidence in the U.S. food supply are safely maintained or restored. Relationship to National Response Plan Emergency Support Function (ESF)/Annex This capability supports the following Emergency Support Functions (ESFs) and Annexes: ESF #1: Transportation (movement of supplies, equipment and carcasses) ESF #2: Communications ESF #3: Public Works (debris removal) ESF #5: Emergency Management ESF #6: Mass Care (animal housing) ESF #7: Resource Support ESF #8: Public Health and Medical Services ESF #10: Oil and Hazardous Materials Response (Environmental Protection) ESF #11: Agriculture and Natural Resources ESF #13: Public Safety and Security ESF #14: Long-Term Community Recovery and Mitigation ESF #15: External Affairs Biological Incident Annex Terrorism Incident Law Enforcement and Investigation Annex Interim/Draft: Food and Agriculture Incident Annex	
Response C8-Environmental Health Capability	Capability Definition Environmental Health is the capability to protect the public from environmental hazards and manage the health effects of an environmental health emergency on the public. The capability minimizes human exposures to environmental public health hazards (e.g., contaminated food, air, water, solid waste/debris, hazardous waste, vegetation, sediments, and vectors). The capability provides the expertise to run fate and transport models; design, implement, and interpret the results of environmental field surveys and laboratory sample analyses; develop protective guidance where none exists; and use available data and judgment to recommend appropriate actions for protecting the public and environment. Environmental Health identifies environmental hazards in the affected area through rapid needs assessments and comprehensive environmental health and risk assessments. It works closely with the health community and environmental agencies to link exposures with predicted disease outcomes, provides input in the development of Crisis and Emergency Risk Communication (CERC) messages, provides guidance on personal protective measures, and advises on environmental health guidelines. Outcome After the primary event, disease and injury are prevented through the quick	Operational Activity

	identification of associated environmental hazards, including exposure to infectious diseases that are secondary to the primary event as well as secondary transmission modes. The at-risk population (i.e., exposed or potentially exposed) receives the appropriate countermeasures, including treatment or protection, in a timely manner. The rebuilding of the public health infrastructure, removal of environmental hazards, and appropriate decontamination of the environment enable the safe re-entry and re-occupancy of the impacted area. Continued monitoring occurs throughout the recovery process in order to identify hazards and reduce exposure. Relationship to National Response Plan Emergency Support Function (ESF)/Annex This capability supports: ESF #1: Transportation ESF #3: Public Works and Engineering ESF #5: Information and Planning ESF #6: Mass Care, Housing and Human Services ESF #8: Public Health and Medical Services ESF #10: Oil and Hazardous Materials Response ESF #11: Agriculture and Natural Resources ESF #14: Long Term Community Recovery and Mitigation Worker Safety and Health Support Annex Nuclear/Radiological Incident Annex Catastrophic Incident Annex Oil and Hazardous Materials Incident Annex	
Response C9- Explosive Device Response Operations Capability	Capability Definition Explosive Device Response Operations is the capability to coordinate, direct, and conduct improvised explosive device (IED) response after initial alert and notification. Coordinate intelligence fusion and analysis, information collection, and threat recognition, assess the situation and conduct appropriate Render Safe Procedures (RSP). Conduct searches for additional devices and coordinate overall efforts to mitigate chemical, biological, radiological, nuclear, and explosive (CBRNE) threat to the incident site. Outcome Threat assessments are conducted, the explosive and/or hazardous devices are rendered safe, and the area is cleared of hazards. Measures are implemented in the following priority order: ensure public safety; safeguard the officers on the scene (including the bomb technician); collect and preserve evidence; protect and preserve public and private property; and restore public services. Relationship to National Response Plan Emergency Support Function (ESF)/Annex This capability supports the following Emergency Support Functions (ESFs): Terrorism Incident Law Enforcement and Investigation Annex ESF #10: Oil and Hazardous Materials Response ESF #13: Public Safety and Security	Operational Activity
Search	Upon being assigned search area, begins search operations	Operational Activity
Search and Assess Site	Once on scene and equipped, provide rapid assessment of assigned Bomb Squad work areas, recommend search priorities/tactics to management, and begin search operations utilizing canine, physical, and technical (e.g. electronic, robotic) search techniques	Operational Activity

Search Scene and Rescue	Upon arrival on scene, initiate search for trapped or endangered victims, remove victims to safe area, and request or provide medical treatment appropriate to the injuries/burns they might have received	Operational Activity
Shelter Companion Animals	Provide temporary shelter for companion animals of displaced owners or those companion animals who are abandoned	Operational Activity
Shelter General Population	Provide temporary shelter for those individuals displaced during an incident	Operational Activity
Site/Incident Specific Safety and Health Training	Site/Incident specific training provides necessary understanding of the hazards identified and assessed in the incident, and the necessary precautions. Site/Incident specific training builds upon pre-incident training, but tailors curriculum to the tasks/hazards of the incident. Site/Incident specific training should reflect policies and procedures specified in the incident specific health and safety plan. Site/Incident specific training needs to have a flexible approach (training may need to be conducted outside of a classroom setting) and should be conducted prior to commencing response activities.	Operational Activity
Size Up (Assess Site)	Observe scene and provide situation report	Operational Activity
Start: Request to activate EOC		Operational Activity
Support and Coordinate Response	Once requested, provide resource, technical, and policy support to the Incident Command by coordinating the actions of off-site agencies, organizations, and jurisdictions, implementing mutual aid agreements, and requesting higher-level assistance	Operational Activity
Support and Coordinate Response Critical Tasks		Operational Activity
Support Cabinet OC as required		Operational Activity
Support Canadian EM response		Operational Activity
Support FCO		Operational Activity
Support identification and determination of potential hazards and threats	Support identification and determination of potential hazards and threats including mapping, modeling, and forecasting	Operational Activity
Support incident response operations	Support incident response operations by providing resources ordered by the Incident Management Team (IMT) through the EOC/MACC/IOF/JFO/ICP	Operational Activity
Support lead department		Operational Activity
Support PCO Clerk		Operational Activity
TC		Operational Node
TC - CANUTEC		Operational Node
TC - Minister		Operational Node
TC - SITCENs		Operational Node
TC - Transportation Saftey Board		Operational Node
Toronto		Operational Node
Track issues until they are		Operational

resolved		Activity
Track status and availability of deployed federal resources		Operational Activity
Transition from response to recovery		Operational Activity
Transition to Long-Term Recovery	Period after the incident is determined to be under control and extended care/service plan by partner government agencies and NGOs becomes active	Operational Activity
Transport	Transport ill and injured patients via the most appropriate mode of transport available (e.g. Ambulances, helicopters, etc.), provide ongoing medical assessment and treatment en route to the designated receiving facility, and upon arrival transfer medical care of the patient(s) to the receiving facility's staff	Operational Activity
Transport, Track, and Manage Resources	Once a resource request has been filled, deploy the resource to the incident through the logistics staging area (LSA) and in coordination with EOC.	Operational Activity
Triage	Once on scene, provide initial and ongoing emergency medical triage of ill and injured patients that prioritizes their respective treatment and transport	Operational Activity
Vancouver		Operational Node
Vancouver - Administration & Finance Section		Operational Node
Vancouver - Chief Constable		Operational Node
Vancouver - City Council		Operational Node
Vancouver - City Manager		Operational Node
Vancouver - Coastal Health Authority		Operational Node
Vancouver - Coastal Health Authority Chief Medical Health Officer		Operational Node
Vancouver - Community Services		Operational Node
Vancouver - Corporate Services		Operational Node
Vancouver - EOC		Operational Node
Vancouver - EOC - Acquisition Unit		Operational Node
Vancouver - EOC - Amateur Radio Unit		Operational Node
Vancouver - EOC - Director of Emergency		Operational Node
Vancouver - EOC - Emergency Social Services		Operational Node
Vancouver - EOC - LO - Municipal Police		Operational Node
Vancouver - EOC - LO - PREOC		Operational Node
Vancouver - EOC - Policy Section		Operational Node

Vancouver - First Responders		Operational Node
Vancouver - First Responders - EMS		Operational Node
Vancouver - First Responders - EMS - Ambulance Services		Operational Node
Vancouver - First Responders - EMS - Hospital Emergency Room		Operational Node
Vancouver - First Responders - EMS - Site Command Post		Operational Node
Vancouver - First Responders - EMS- Operation Centre		Operational Node
Vancouver - First Responders - Fire		Operational Node
Vancouver - First Responders - Fire -Site Command Post		Operational Node
Vancouver - First Responders - Police		Operational Node
Vancouver - First Responders - Police - Opereations Centre		Operational Node
Vancouver - First Responders - Police - Site Command Post		Operational Node
Vancouver - General Manager Community Services		Operational Node
Vancouver - General Manager Corporate Services		Operational Node
Vancouver - General Manager Engineering Services		Operational Node
Vancouver - General Manager of the Park Board		Operational Node
Vancouver - Manager Fire & Rescue Services		Operational Node
Vancouver - Mayor		Operational Node
Vancouver - Park Board		Operational Node
Vancouver - Planning & Intelligence Section		Operational Node
Vancouver - Public Information Centre		Operational Node
Verify that all participating	Verify that all participating public safety-related Communication Centers, serving	Operational

public safety-related Communication Centers	the EOC/MACC/IOF directly or indirectly, have established communication links with the EOC/MACC/IOF	Activity

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The Public Security Technical Program (PSTP) Emergency Management (EM) Operations Process Mapping study was designed to build a generic, all-hazard representation of the emergency management operations that provide the foundation of the Canadian government response capability. The project leveraged specific works to design the approach that was used to conduct the study. These works include: capability based analysis, the four-pillared emergency management capability areas (prepare, prevent, respond, recover), the US Department of Homeland Security (DHS) Target Capability List (TCL), the Canadian Federal Emergency Response Plan (FERP), the US Department of Defense Architecture Framework (DoDAF) and the Joint Command Decision Support for the 21st Century (JCDS21) and Canadian Forces Experimental Centre (CFEC) Command and Sense (C&S) Team architecture products. The merging of concepts from these sources formed the methodology used capture integrated emergency management operation processes across all stakeholders.

This project has produced a series of architecture products that characterise high level generic emergency management response processes situated in an all-hazards environment. As outputs of this study, these products provide a baseline for further research in the area of emergency management. Using the products as templates, investigation with stakeholders will enable the capture of specific processes for a geographical region, an organisation and/or a hazard with a comprehensive and standard framework.

The outputs from this study will be used to support future PSTP activities required for program definition, and to facilitate engagement with emergency management (EM) sector authorities from all levels. As a research and analysis tool, it will be used to identify, situate and characterize key interface and decision-making steps in the overall Canadian EM process. The end product of this study may also prove useful as a first step towards developing an executable process model for more in-depth analysis of EM processes, and for use in tandem with other studies that apply modeling and simulation to assess EM operational effectiveness before and after changing elements (people/process/tools).

L'étude du Graphique du processus des opérations de la gestion des urgences du Programme technique de sécurité publique a été conçue pour élaborer une représentation générique tous risques des opérations de gestion des urgences qui sert de base à la capacité d'intervention du gouvernement canadien. Le projet a permis d'élaborer un travail spécifique en vue de concevoir l'approche, qui a été utilisée pour mener l'étude. Ce travail a été consacré notamment à l'analyse basée sur la capacité, les secteurs de capacité de gestion des urgences basée sur quatre piliers (préparer, prévenir, intervenir, rétablir), la Liste des capacités ciblées (LCC) du Department of Homeland Security (DHS) des États-Unis, le Plan fédéral d'intervention d'urgence canadien, le Cadre d'architecture du département de la Défense des États-Unis (DoDAF) et le Projet de démonstration de technologies – Aide à la décision des commandements interarmées pour le XXIe siècle et les produits d'architecture de l'équipe Commandement et détection du Centre d'expérimentation des Forces canadiennes. La fusion de concepts provenant de ces sources a formé la méthodologie utilisée pour relever les processus des opérations de la gestion des urgences auprès de tous les intervenants.

Ce projet a créé une série de produits d'architecture qui caractérisent des processus génériques de gestion des urgences de niveau supérieur situé dans un environnement tous risques. En tant

que résultats de cette étude, ces produits fournissent une base de référence pour d'autres recherches dans le domaine de la gestion des urgences. En utilisant ces produits comme modèles, l'étude avec des intervenants permettra de capturer les démarches spécifiques d'une région géographique, une organisation et/ou un risque dans un cadre détaillé et normalisé.

Les résultats de cette étude seront utilisés pour appuyer de futures activités PSTP exigées pour la définition de programme et pour faciliter l'engagement avec les autorités du secteur de la gestion des urgences de tous les niveaux. En tant qu'outil de recherche et d'analyse, il sera utilisé pour identifier, situer et caractériser l'interface principale et les étapes décisionnelles dans l'ensemble du processus de gestion des urgences canadien. Le produit final de cette étude peut s'avérer aussi utile en tant que première étape du développement d'un modèle de processus exécutable d'une analyse plus détaillée des processus de gestion des urgences et pourrait être utilisé en collaboration avec d'autres études qui se servent de modélisation et de la simulation pour évaluer l'efficacité opérationnelle de la gestion des urgences avant et après le changement d'éléments (personne/processus/outils).

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Emergency management; Business processes; All-hazard, capability-based analysis; Architecture